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Building Partner Capacity to Combat Weapons of Mass Destruction

Jennifer D. P. Moroney, Joe Hogler

With Benjamin Bahney, Kim Cragin, David R. Howell, Charlotte Lynch, Rebecca Zimmerman

Prepared for the Defense Threat Reduction Agency

NATIONAL DEFENSE RESEARCH INSTITUTE

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Preface

This RAND National Defense Research Institute monograph outlines and then applies a four-step process for developing regional approaches to building partner capacity (BPC) to combat weapons of mass destruction (WMD). These steps include identifying capabilities and desired end states relative to the WMD threat, working with potential partners, identifying relevant BPC ways and means, and developing a framework to assess the effectiveness of BPC programs and activities. In doing so, the monograph identifies seven key themes that are linked to the recommendations. These key themes include improving guidance, increasing visibility of ongoing activities at a global level, improving coordination, encouraging collaboration and implementation, conducting assessments, and securing resources.

This research was sponsored by the Defense Threat Reduction Agency's (DTRA) Advanced Systems and Concepts Office (ASCO) and was conducted within the International Security and Defense Policy Center of the RAND National Defense Research Institute, a federally funded research and development center sponsored by the Office of the Secretary of Defense, the Joint Staff, the Unified Combatant Commands, the Department of the Navy, the Marine Corps, the defense agencies, and the defense Intelligence Community. This research is designed to provide BPC planners with a process for developing regional approaches for combating WMD and assessing their effectiveness.

For more information on RAND's International Security and Defense Policy Center, contact the Director, James Dobbins. He can be

reached by email at James_Dobbins@rand.org; by phone at 703-413-1100, extension 5134; or by mail at RAND, 1200 South Hayes Street, Arlington, Virginia 22202-5050. More information about RAND is available at www.rand.org.

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Summary

This RAND National Defense Research Institute monograph outlines and then applies a four-step process for developing regional approaches to BPC to combat WMD. Limited resources, access, and incomplete knowledge of WMD threats create a need for working with appropriate partner countries around the world to address these challenges. The monograph offers seven key themes to consider when implementing BPC regional approaches. The monograph argues that the United States needs a coordinated effort to enhance partners' border security, WMD detection, and interdiction, and other capabilities to address the global nature of the threat. When nations are less capable, it is critical to focus U.S. assistance on building indigenous capacity to combat WMD threats.

Developing a Process to Build Partner Capacity for Combating WMD

This monograph outlines a four-step process for developing regional approaches to BPC to combat WMD threats. These steps include

- identifying capabilities and desired end states relative to the WMD threat
- working with potential partners
- identifying relevant BPC ways and means
- developing a framework to assess the effectiveness of BPC programs and activities.

Recommendations for the Department of Defense (DoD)

The monograph provides specific recommendations for implementing each step in the four-step process. These recommendations comprise a means for DoD planners, and means for other agencies as well, to efficiently and effectively build partner capacity to combat WMD. The monograph offers seven key themes that are linked to the recommendations. These key themes include improving guidance, increasing visibility on activities at a global level, improving coordination, encouraging collaboration and implementation, conducting assessments, and securing resources.

For step one, identifying capabilities and desired end states relative to the WMD threat, we recommend that DoD ensure that programmatic ends are linked to strategic guidance. Further, we recommend regular planning sessions among the various program managers to ensure that the aims of the DoD BPC programs are complementary. Regular country-specific or functional working groups should be held to share ideas and lessons identified. Finally, we recommend that the organizational roles and responsibilities for DoD stakeholders—including the geographic and functional combatant commands—be fully defined and published.

For step two, working with potential partners, we recommend that DoD planners apply the process described in Chapter Four, using criteria outlined in this monograph, to understand which partners to work with and how to work with them. The criteria, while illustrative, demonstrate the importance of considering a range of factors that can help describe a potential partner's relevance to a WMD threat, as well as how the United States should approach working with that potential partner. Planners should coordinate with interagency and international counterparts to gain insights and to look for opportunities for collaboration. Finally, we recommend considering additional sources of insight into partners' perspectives and needs, such as the individual country reports provided in response to UN Security Council Resolution 1540, which obliges states to refrain from supporting by any means nonstate actors who wish to develop, acquire, manufacture, possess, transport, transfer, or use nuclear, chemical, or biological weapons.

For step three, identifying relevant BPC ways and means, we recommend that planners widen their knowledge (to the extent possible) of other DoD, U.S. government, allied, and international and regional organizations' BPC for combating WMD activities. This process would include using available information sharing systems, attending and participating in other agencies' working groups, and even supporting other agencies' events and activities. Chapter Four provides the framework for identifying the activity gaps and redundancies on a regional basis. By applying such a framework, planners will have a better understanding of the most effective and efficient ways to best apply resources.

For step four, developing a framework to assess the effectiveness of BPC programs and activities, we recommend that planners implement the seven-step assessment framework outlined in Chapter Five. Specifically, the process should begin with a pilot assessment to select a few programs to test the framework's application in a specific country or region. Further, we recommend that DoD consider establishing a single resource advocate for BPC to combat WMD programs, with single points of contact within each of the combatant commands and DoD supporting agencies, such as DTRA.

Acknowledgments

The authors wish to thank a number of people for their support of the research reported in this monograph. First of all, our study sponsors in DTRA/ASCO—Lt Col Jim Gruny (U.S. Marine Corps), Lt Col Bruce Arrington (U.S. Air Force), and Lt Col Scott Whitaker (U.S. Marine Corps), and David Hamon—provided outstanding support throughout the year. Moreover, COL Ken Chance (U.S. Army), LTC Scott Sweetser (U.S. Army), and MAJ Rich Spencer (U.S. Army) from the DTRA Theater Security Cooperation branch, while not being direct sponsors, shared their insights and ideas throughout the course of the study. We also wish to thank LTC Jeff Predmore (U.S. Army) and Ruth Keipp from DTRA International Counterproliferation Program for sharing their insights.

We are also grateful for the assistance and insights from the Policy office in the Office of the Secretary of Defense—specifically in the Global Threats office, Col David Belote (U.S. Air Force) of the Joint Staff (Combating WMD Division)—and the DoD Regional Centers. The geographic combatant commands played a large role in this effort. We wish to acknowledge the U.S. European Command Counterproliferation branch and the Theater Security Cooperation (TSC) Division, the U.S. Central Command Combating WMD Division, the U.S. Pacific Command Combating WMD and TSC offices, and U.S. Southern Command TSC and Combating WMD offices for their insights shared during the combatant command workshop in particular. We also wish to thank the Special Operations Command and the Strategic Command (STRATCOM) Building Partner Capac-

ity planners for their insights during our meetings at those organizations. At the Department of Energy, a special thanks to the Second Line of Defense program. Moreover, we are grateful to officials from NATO and the Supreme Headquarters Allied Powers Europe, particularly the offices devoted to combating WMD, the NATO School, the Organization for Security and Co-operation in Europe, the United Kingdom Combating WMD offices in the Foreign Commonwealth office and the Ministry of Defence, the U.S. Embassy in Moscow, and the National Protection and Rescue Directorate, which is part of the government of Croatia.

At RAND, we wish to acknowledge the contributions of numerous research staff for their feedback on earlier briefings. We are also most appreciative of the careful editorial review of Mike Neumann and the formatting efforts of Hilary Wentworth.

Abbreviations

AFRICOM	U.S. Africa Command
AG	Australia Group
APAN	Asia-Pacific Area Network
AOR	area of responsibility
ASCO	Advanced Systems and Concepts Office
ATA	Anti-Terrorism Assistance Program
BPC	building partner capacity
BSEC	Black Sea Economic Cooperation
BTRP	Biological Threat Reduction Project
BTWC	Biological and Toxins Weapons Convention
CBRN	chemical, biological, radiological, and nuclear
CENTCOM	U.S. Central Command
CIS	Commonwealth of Independent States
CMEP	Civil-Military Emergency Preparedness
COCOM	combatant command
COE	center of excellence
CSI	Container Security Initiative

CTR	Cooperative Threat Reduction
CWC	Chemical Weapons Convention
CWD	Chemical Weapons Destruction
CWMD	combating weapons of mass destruction
DHS	Department of Homeland Security
DMC	Defense and Military Contacts Program
DMHA	Disaster Management and Humanitarian Assistance
DoD	Department of Defense
DOE	Department of Energy
DOJ	Department of Justice
DOS	Department of State
DTRA	Defense Threat Reduction Agency
EADRCC	Euro-Atlantic Disaster Response Coordination Centre (NATO)
EUCOM	U.S. European Command
EXBS	Export Control and Related Border Security
FSU	former Soviet Union
FY	fiscal year
GCMC	George C. Marshall Center for Strategic Studies
GDP	gross domestic product
GEF	Guidance for Employment of the Force
GICNT	Global Initiative to Combat Nuclear Terrorism

GTRP	Global Threat Reduction Programme
IAEA	International Atomic Energy Agency
IBIT	International Border Interdiction Training
ICP	International Counterproliferation (program)
ICS	International Container Security
IEMC	International Emergency Management and Cooperation
INECP	International Nonproliferation Export Control Program
INTERDICT/ RADACAD	Interdiction of Materials and Radiation Academy
IPP	Initiatives for Proliferation Prevention
JCBRN	Joint Chemical, Biological, Radiation, & Nuclear (Defence) (NATO)
MPAT	Multinational Planning Augmentation Team
MPC&A	Material, Protection, Control, and Accountability
MTCR	Missile Technology Control Regime
NATO	North Atlantic Treaty Organization
NATO CBRN BN	NATO CBRN Defense Battalion
NCI	Nuclear Cities Initiative
NMS-CWMD	National Military Strategy to Combat Weapons of Mass Destruction
NPT	Nuclear Nonproliferation Treaty
NSG	Nuclear Suppliers Group
NWFZ	nuclear weapons free zone

OAS	Organization of American States
OPANAL	Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean
OSCE	Organization for Security and Co-operation in Europe
OSD	Office of the Secretary of Defense
PACOM	U.S. Pacific Command
PPI	Proliferation Prevention Initiative
PSI	Proliferation Security Initiative
QDR	Quadrennial Defense Review
RDD	radiological dispersal device
RDT&E	research, development, test, and evaluation
SAMM	Security Assistance Management Manual
SCC	STRATCOM Combating WMD Center
SHAPE	Supreme Headquarters Allied Powers Europe
SLD	Second Line of Defense
SOCOM	Special Operations Command
SOUTHCOM	U.S. Southern Command
SPP	State Partnership Program
STRATCOM	U.S. Strategic Command
TSC	Theater Security Cooperation
UNSCR	United Nations Security Council Resolution
WMD	Weapons of Mass Destruction

CHAPTER ONE

Introduction

One of the greatest challenges to U.S. national security is the threat of weapons of mass destruction (WMD) falling into the hands of those who would use them indiscriminately against the U.S. homeland, interests abroad, or partners and allies.[1] It is not difficult to imagine how terrorists might eagerly use a weapon that could kill hundreds or thousands, or how much a terrorist network would pay for such a weapon.[2]

While alarming, the most immediate threat is not that a fully assembled nuclear, biological, or chemical weapon would somehow change hands. Rather, the illicit transfer of components, technologies, specialized industrial equipment, and dual-use items or chemicals to state or nonstate actors is especially difficult to observe or detect.[3] The United States simply does not have the resources, access, or in-depth knowledge of every possible transit route, source, or network to stop WMD threats. There is still much to be done to help partner coun-

[1] The National Military Strategy to Combat Weapons of Mass Destruction (NMS-CWMD) defines WMD as "Weapons that are capable of a high order of destruction and/or of being used in a manner so as to destroy large numbers of people. Weapons of mass destruction can be nuclear, biological, chemical, and radiological weapons" (Chairman of the Joint Chiefs of Staff, 2006).

[2] An audiotape released after the failed 2004 Amman gas attack records Abu Musab Al-Zarqawi stating that, "if we did possess a chemical bomb, we wouldn't hesitate one second to use it" (Leiken and Brooke, 2004).

[3] See, for example, Hibbs, 2003, and Corera, 2006.

tries appreciate the urgency of this problem and develop cooperative approaches to combat WMD threats as close to the source as possible.

A coordinated effort to enhance partner countries' ability to combat WMD is needed to address the global nature of the problem.[4] The importance of nations working together to combat WMD is highlighted in the Group of Eight Global Partnership Against the Spread of Weapons and Materials of Mass Destruction agreement:

> Recognizing that this global partnership will enhance international security and safety, we invite other countries that are prepared to adopt its common principles and guidelines to enter into discussions with us on participating in and contributing to this initiative (Group of Eight, 2002).

Also, consider the United Nations Security Council Resolution 1540 (UNSCR 1540), which

> obliges states, *inter alia*, to refrain from supporting by any means non-State actors from developing, acquiring, manufacturing, possessing, transporting, transferring or using nuclear, chemical or biological weapons and their delivery systems (United Nations Security Council, 2007).

This resolution highlights the importance of partner capacity-building activities for combating WMD. UNSCR 1540 imposes, for example, binding obligations on all states to establish domestic controls to prevent proliferation and also encourages enhanced international cooperation on such efforts. The UN maintains a Web site that contains each of the country reports, including requests for assistance and offers to assist.[5]

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[4] Combating WMD refers to the three pillars of counterproliferation, nonproliferation, and consequence management as described in The White House, 2002, p. 2.

[5] Countries were instructed to focus their remarks on the WMD threat, current capabilities to counter the threat, and areas in which assistance is needed to improve their capabilities to combat WMD.

U.S. Partner Capacity-Building Efforts

Where nations are less capable, it is critical to focus U.S. assistance on building indigenous capacity to combat WMD threats. Building partner capacity (BPC) is essential to the success of the U.S. mission to combat WMD. The National Military Strategy to Combat WMD (NMS-CWMD) highlights cooperation with security partners as a critical enabler, and it includes, as one of the eight key mission areas, "security cooperation and partner activities." These sentiments are reinforced in the Quadrennial Defense Review (QDR) BPC Roadmap and the Office of the Secretary of Defense (OSD) Guidance for Employment of the Force (GEF). Together these provide a strong impetus for the Department of Defense (DoD) to identify and assess current partner capacity-building efforts, to identify capacity gaps, and to determine the most appropriate approaches to address the most critical gaps.

Traditionally focused on the former Soviet Union (FSU), U.S. BPC for combating WMD programs tend to focus on

- training and equipping foreign militaries
- training and equipping foreign civilian agencies
- securing WMD facilities and improving infrastructure.

Some of these efforts have expanded to other regions that carry a risk of WMD transshipment, including Southeast Europe, the Middle East, and Latin America. For example, the Cooperative Threat Reduction (CTR) program is now assisting Albania's efforts to eliminate its chemical weapons stockpiles. Moreover, since 1998, the Defense Threat Reduction Agency (DTRA) International Counterproliferation (ICP) program has provided law enforcement and border security training and equipment to 22 countries, and the CTR program plans to expand its reach, pending OSD approval.[6] Other efforts address strengthening legal authorities, securing WMD materials, and enhancing accountability.

[6] Discussion with DTRA officials, December 2007.

The U.S. military is equipped with capabilities that are readily transferable to partners dealing with WMD threats. Three such programs designed to transfer capabilities are the CTR Chemical Weapons Destruction (CWD) program, the CTR Proliferation Prevention Initiative (PPI), and the ICP program, which together provide the resources to train and equip foreign militaries and civilians to eliminate WMD, secure WMD facilities, and enhance border security. However, partner capacity is not exclusively built by the military. Civilian agencies can and do engage nonmilitary counterparts, such as border guards, customs officials, and other frontline security services. Some examples of these programs include the Export Control and Related Border Security (EXBS) program, the Department of Energy (DOE) Second Line of Defense (SLD) program, and the Department of Homeland Security (DHS) Container Security Initiative (CSI) (Moroney and Hogler, 2006).

Despite efforts by the National Security Council, the State Department, and OSD to better understand, coordinate, and deconflict the activities of these programs, there is still a fairly widespread lack of visibility among key interagency stakeholders, the programs' activities, and how they can complement and supplement each other. Yet, the situation is starting to improve. Certainly, within DoD, several key combating WMD programs, including the ICP and CTR programs, have been consolidated under one Assistant Secretary of Defense for Global Security Affairs in an effort to improve coordination and identify combating WMD partner capacity-building gaps. Another significant issue is that there is currently no way to assess the effectiveness of these programs beyond anecdotal evidence. There is no comprehensive assessment framework for BPC activities in place at the OSD or combatant command (COCOM) level; the programmatic assessment efforts tend to focus only on inputs (i.e., resources) as opposed to how activities contribute to longer-term outcomes.[7]

In short, what is needed is a process for developing approaches to building partner capacity to combat WMD—a process that lever-

[7] This monograph, therefore, devotes considerable attention to the topic of assessment in Chapter Five.

ages all available resources by coordinating and collaborating with U.S. government counterparts, key partners and allies, and international and regional organizations. This monograph describes that process.

Monograph Methodology and Overview

Over the course of approximately one year in 2007 the study team reviewed the literature on WMD threats around the world and conducted focused discussions with key U.S. government planners and program managers from DoD, the State Department, and DOE.[8] In addition, we met with officials from key allies and regional organizations also conducting BPC for combating WMD activities. Specifically, we spoke with officials from NATO, the Supreme Headquarters Allied Powers Europe (SHAPE), and the Organization for Security and Cooperation in Europe (OSCE), as well as with select U.S. allies, including the United Kingdom and Australia, and leading regional partners, such as Croatia and the Czech Republic. We also consulted specialists at several DoD academic organizations that receive U.S. security cooperation resources.[9] Further, we spoke with Russian officials regarding the effects of U.S. combating WMD assistance, and we also observed three multinational BPC for combating WMD field events, specifically the Army Civil-Military Emergency Preparedness (CMEP) tabletop exercise in Batumi, Georgia; a REGIONAL COOPERATION combined exercise in Astana, Kazakhstan; and a joint DTRA–George C. Marshall Center for Strategic Studies (GCMC) conference on countering WMD proliferation in the Black Sea region.[10] Several key questions were developed to guide the research process:

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[8] Specifically, we spoke with the Theater Security Cooperation (TSC) and Combating WMD offices from all geographic COCOMs, and key functional COCOMs, specifically the U.S. Strategic Command (STRATCOM) and the Special Operations Command (SOCOM). See the Appendix for a list of participating agencies.

[9] Namely the George C. Marshall Center for Strategic Studies (GCMC), the Asia Pacific Center for Strategic Studies, and the NATO School.

[10] We also drew on insights from previous observations of ICP program and PPI events in Azerbaijan, which occurred prior to the study's commencement.

- Where should the United States act and with whom should it partner? For example, are there growing or emerging WMD threats that require new, intensified, or different regional approaches?
- What should the United States do and how should it do it? In other words, what BPC activities can be applied, and how can DoD gauge the willingness and capacity of potential partners to work with the United States to combat WMD within their own borders? Moreover, what role can and should DoD supporting agencies, such as DTRA, play?
- Finally, how can the United States know that it has done the right things with the right partners in the right ways—i.e., assessments?

Chapter Two provides the arguments for a new approach to BPC for combating WMD by briefly outlining the strategic guidance, defining key concepts, and examining the proliferation of initiatives that has resulted in overlaps and gaps in the U.S. government's overall approach to working with partner countries. It highlights the role of DoD and its supporting agencies in this approach. The chapter concludes with an overview of some of the more significant challenges to developing BPC for combating WMD approaches from a planning, execution, and assessment perspective.

Chapter Three begins to outline the four-step process for developing regional approaches to BPC to combat WMD threats. It begins with an explanation of why it is important for BPC planners to understand the WMD threat—a concept that underpins the first step of the process, i.e., "identifying capabilities and desired end states relative to the WMD threat." In addition, the chapter shows how this same understanding of the WMD threat can suggest potential partners with whom to build capacity. The key question this chapter addresses is: Where should the United States act and with whom should it partner?

Chapter Four addresses the second and third steps of the process, namely working with potential partners and identifying relevant BPC ways and means. It describes how BPC planners can determine appropriate relationships with potential partners by understanding the *willingness* of candidate partner countries to work with the United States,

as well as their current *capacity* to combat WMD threats. The key question this chapter addresses is: What should the United States do and how should it do it?

Chapter Five focuses on the fourth step in the process by describing a framework to assess the effectiveness of BPC programs and activities. DoD entities—including the military departments, COCOMs, and supporting agencies—are required by OSD to assess the effectiveness of their security cooperation programs and activities against OSD and COCOM objectives. Currently the department lacks a robust (i.e., within and across the various programs it controls) assessment framework to address this requirement. DoD planners need a way to more fully understand how their activities support U.S. national security, OSD, and COCOM-level priorities, as well as a way to determine which programs and activities, and combinations of such, are having the most significant impact, and where and why this impact is occurring. The key question this chapter addresses is: How can the United States know it has done the right things with the right partners in the right ways?

Finally, Chapter Six consolidates and presents the study team's overall conclusions and recommendations for the way ahead along the lines of the four-step process. It provides specific recommendations linked to each step, offering seven key themes that are important for DoD to consider for BPC for combating WMD. The key themes include improving *guidance*, increasing *visibility* on activities at a global level, improving *coordination*, encouraging *collaboration* and *implementation*, conducting *assessments*, and securing *resources*.

In summary, the monograph is designed to provide BPC planners with a process for developing regional approaches. BPC planners must, as we point out, understand the WMD threat, which changes over time. This monograph does not, however, aim to be an authoritative review of WMD threats—that is a task for intelligence officials and regional experts. Neither does it provide a technical discussion of capabilities to combat these WMD threats—although it does offer a way to understand the types of technologies and capabilities that might be required. Finally, while the monograph is not a "fact book" of country data, it does strongly emphasize the importance of BPC planners work-

ing together with regional and country-specific experts to understand the nature of potential partners and the character of U.S. relationships with them. The monograph then, is process oriented and assumes that BPC planners will make full use of the extensive resources available to them as they implement the four-step process.

CHAPTER TWO

Challenges of Building Partner Capacity for Combating WMD

This chapter lays the groundwork for the following chapters, which describe in detail the four-step process for building regional BPC approaches for combating WMD. It also provides the arguments for why a new approach to BPC for combating WMD is needed in the first place. It begins by briefly outlining the strategic guidance for BPC for combating WMD and then continues by defining key concepts employed in this monograph, namely security cooperation and BPC. Next, an overview is presented of the current state of BPC for combating WMD activities, what we call a "proliferation of initiatives," which has resulted in overlaps and gaps in the U.S. government's overall approach to working with partner countries, highlighting the role of DoD. We also define what is meant by a "BPC approach." We then discuss some of the more significant challenges to developing BPC approaches from a planning, execution, and assessment perspective.

Understanding BPC for Combating WMD Guidance

The imperative to work with partners to build their capacity is a common thread that runs through U.S. strategy and planning documents. At the national level, for example, *The National Strategy to Combat Weapons of Mass Destruction,* which provides broad strategic guidance to BPC planners, emphasizes the following:

> WMD represent a threat not just to the United States, but also to our friends and allies and the broader international community. For this reason, it is vital that we work closely with like-minded countries on all elements of our comprehensive proliferation strategy (The White House, 2002, p. 6).

At the department level, combating WMD relies on BPC as a strategic enabler and emphasizes its importance across all the military combating WMD missions:

> Building partnership capacity bilaterally and multilaterally enhances our capability to combat WMD. Incorporating our partners' and allies' combating WMD capabilities supports our ability to defend the homeland, deter forward, and conduct multiple, simultaneous activities (Chairman of the Joint Chiefs of Staff, 2006, p. 21).

Moreover, the new OSD GEF provides themes approved by the Secretary of Defense to guide COCOM efforts to develop functional plans for combating WMD.[1] GEF also ensures that the aims of the NMS-CWMD and the overall DoD security cooperation effort are consistent.

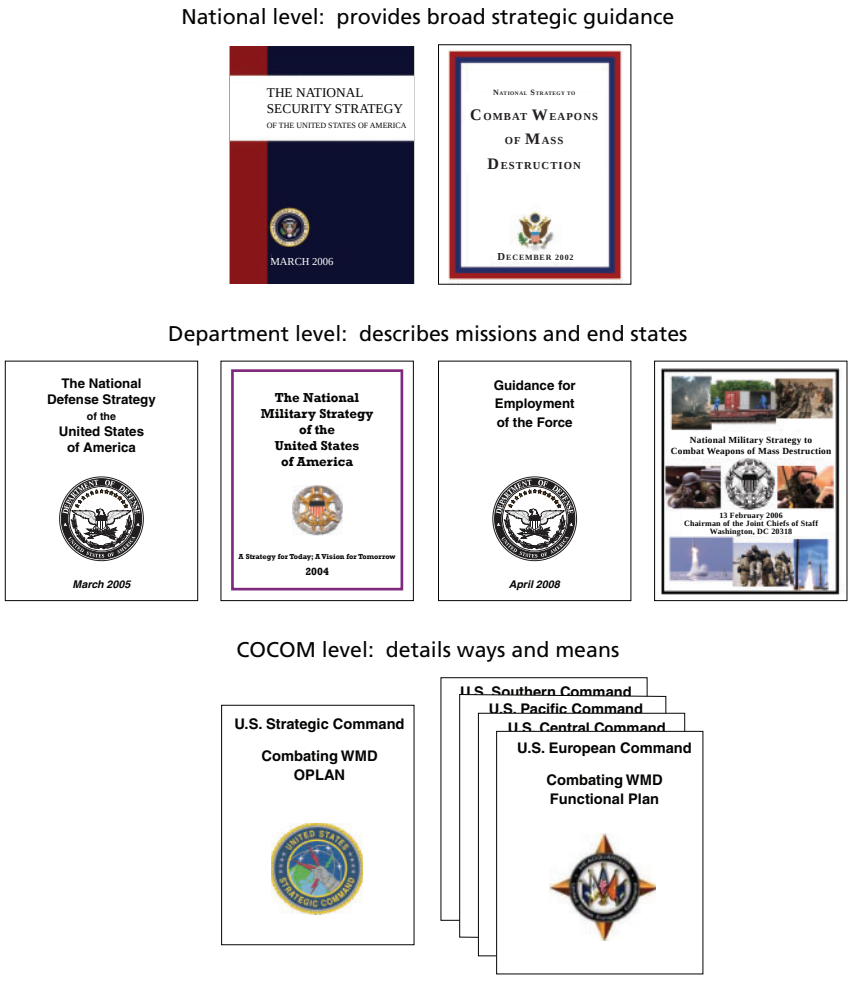
BPC planners draw on guidance from both of these levels to develop functional plans that describe the ways and means of building partner capacity to combat WMD. The types of guidance and their functions are shown in Figure 2.1.

What Is Building Partner Capacity?

Two key terms that are used throughout this monograph require explanation. *Security cooperation* replaced the earlier concept of "engagement" in 2001. However, *building partner capacity* is a more recent

[1] GEF merges the Security Cooperation Guidance, DoD Contingency Planning Guidance, Nuclear Planning Guidance, and Global Defense Posture Guidance into a single document.

Figure 2.1
Combating WMD and BPC Guidance



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concept, emerging out of the 2006 QDR as a major focus area. Both of these terms are explained in the following paragraphs.

Security Cooperation

According to the Defense Security Cooperation Agency Web site, *security cooperation* includes

> those activities conducted with allies and friendly nations to: build relationships that promote specified U.S. interests, build allied and friendly nation capabilities for self-defense and coalition operations, [and] provide U.S. forces with peacetime and contingency access (DoD, 2007b).

Examples include training and combined exercises, operational meetings, contacts and exchanges, security assistance, medical and engineering team engagements, cooperative development, acquisition and technical interchanges, and scientific and technology collaboration (U.S. Air Force, 2006 p. 3). *Security assistance* is a subset of security cooperation and consists of "a group of programs, authorized by law that allows the transfer of military articles and services to friendly foreign governments" (DoD, 2007a).[2] These programs include Foreign Military Sales, Foreign Military Financing, International Military Education and Training, and Direct Commercial Sales, for example. Security assistance programs are within the purview of the State Department under Title 22 of the U.S. Code, while other, nonsecurity assistance programs conducted by DoD are under Title 10.

Building Partner Capacity

Building partner capacity is a term of art employed to describe "targeted efforts to improve the collective capabilities and performance of the Department of Defense and its partners" (DoD, 2006b, p. 4). Building partner capacity can be thought of as an umbrella initiative that draws on security cooperation activities to achieve its goals. The primary goal of BPC is to undertake a multiagency approach to meeting U.S. strategic objectives. This approach includes not only U.S. government entities, but also key partners and allies abroad. According to the 2006 BPC Roadmap, which stemmed from the last QDR, some of the U.S. objectives that can be attained only by working with and through foreign partners include defeating terrorist networks; preventing hostile states and nonstate actors from acquiring or using WMD; conducting irregular warfare and stabilization, security, transition, and

[2] A full listing of security assistance programs may be found in DoD, 2007a, p. 33.

reconstruction operations; and enabling host countries to provide good governance. Activities designed to build partner capacity ideally seek to maximize the partner's ability to contribute to these objectives. Finally, the BPC concept attempts to place the efforts of various organizations into a coherent framework.

A "Proliferation of Initiatives"

The Departments of State, Defense, Homeland Security, Energy, and Commerce—all supported by the Intelligence Community—provide combating WMD assistance to partner countries. DoD engages partners and allies through focused training, workshops, exercises, defense and military contacts, subject matter information exchanges, and a host of other ways, as defined in Chapter Four.

In terms of resources (i.e., money and manpower), the United States invests substantially in BPC efforts around the world. Most of the pre-9/11 assistance programs increased in resource allocation in 2002, either through the annual appropriation or through supplemental funds. Examples include the State Department EXBS program, the Nonproliferation and Disarmament Fund program, the Anti-Terrorism Assistance Program (ATA), and the DOE SLD program. For example, between the years 2000 and 2002, the Nonproliferation and Disarmament Fund increased from $15 million to $38 million, EXBS increased from $19 million to $45 million, and the ATA increased dramatically from $38 million to $135.6 million (U.S. Department of State, not dated[b]).

Since 9/11, many new U.S. government programs to combat WMD threats have been created to attempt to fill perceived gaps in partner capacity-building activities. These include, for example, the DoD CTR PPI, which focuses on border security in the non-Russia FSU; the DoD Counterterrorism Fellowship Program; the DOE Material, Protection, Control, and Accountability (MPC&A) program; DHS CSI; and the DoD Global Train and Equip program, or "1206" as it is often referred to because this program is tied to Section 1206 of the 2008 Defense Appropriations Act.

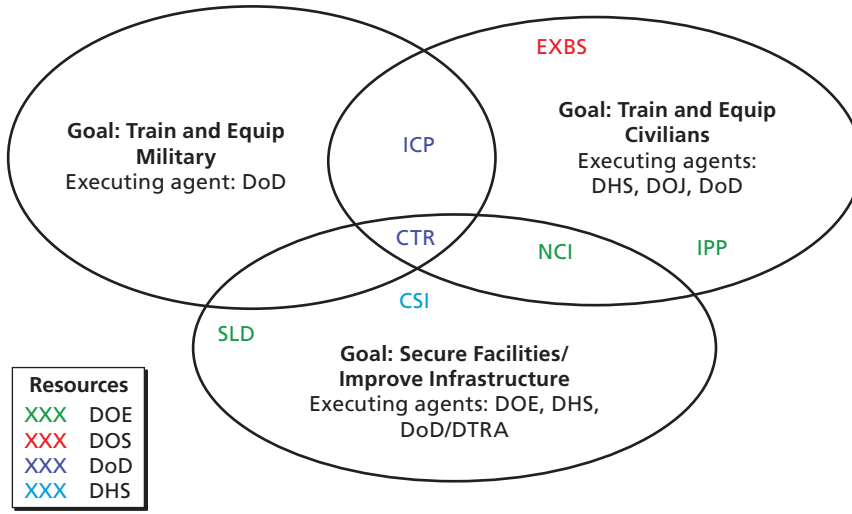
Moreover, some existing programs that traditionally did not have a WMD focus have also sought to incorporate combating WMD objectives into their activities. Examples include Chairman of the Joint Chiefs of Staff exercises, such as the U.S. Central Command (CENTCOM) REGIONAL COOPERATION annual exercise in Central Asia, and the Warsaw Initiative–funded CMEP program, which is executed by the U.S. Army Corps of Engineers.

These programs each have their own rules that govern their use of funds. The authorities and regulations are varied; i.e., some allow for the provision of training and equipment, while others do not. As a general rule though, DoD does not engage in training with security services of partner countries that are outside of the military structure without presidential approval (e.g., as in the case of Iraq and Afghanistan BPC efforts). For example, for most DoD programs (with the exception of the DTRA ICP program), training the land or maritime border guards, customs officials, or other paramilitary police officials is prohibited. However, the U.S. Departments of State, Homeland Security, Justice, Energy, and Commerce regularly engage these nonmilitary security services in partner countries.

Figure 2.2 illustrates how various programs across several U.S. agencies have similar aims with obvious overlap. Overlap is not necessarily a bad thing, but without greater visibility, DoD's opportunities to coordinate and collaborate with these other agencies are limited. The impact, of course, is that resources may not be used in the most effective way and the partners may not receive the maximum benefit from U.S. efforts.

Figure 2.2 shows, in an illustrative way, how the majority of U.S. government resources for BPC to combat WMD are focused on training and equipping nonmilitary security services, securing facilities, and improving infrastructure. This is because for many of the partner countries, the frontline officials for combating WMD are not military, but rather civilian or paramilitary. Thus, there is a real need for DoD to coordinate with other U.S. agencies and to support their BPC for combating WMD activities whenever possible.

Figure 2.2
Illustrative U.S. Government Programs for BPC to Combat WMD



SOURCE: Reprinted from Jennifer Moroney and Joe Hogler, "Building Partner Capacity to Combat WMD Proliferation," *Joint Force Quarterly*, No. 42, 3rd Quarter, 2006.

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DTRA's Role in Building Partner Capacity

Within DoD, it is important to highlight BPC for combating WMD programs within DTRA because they are extensive. As a DoD support agency, DTRA plays a considerable role in BPC for combating WMD threats. DTRA manages and executes 11 programs designed to enhance the proficiency and capacity of our partners and allies around the world. Ten of these are CTR programs, focused on FSU, and the 11th is the ICP program, which focuses on FSU and the Balkans.

DTRA primarily conducts training, exercises, workshops, assessments, and research, development, test, and evaluation (RDT&E), as well as providing equipment. These broad categories of activities, or "ways," are discussed in greater detail in Chapter Four. DTRA's regional focus has been predominately on Russia and FSU, but that is starting

to change. This change reflects the fact that combating WMD is much more than just "securing WMD stockpiles"; it also includes preventing proliferation, acquisition, and use, and it is global in nature.

Table 2.1 provides an overview of the $350 million fiscal year (FY) 2007 budget for the ten CTR programs implemented by DTRA, in coordination with other U.S. agencies. In addition to the CTR program, the ICP program typically accounts for an additional $10 million to $12 million annually.

DTRA's overall budget for BPC for combating WMD activities of more than $360 million makes DTRA a major player in U.S. government BPC efforts. However, as previously mentioned, DTRA has limited visibility into other DoD activities and other activities taking

Table 2.1
CTR Programs Implemented by DTRA, FY 2007

Objective	Millions of Budgeted Dollars
1. Dismantle FSU WMD and associated infrastructure	**$121.4**
Strategic Offensive Arms Elimination program—Russia CWD program—Russia Strategic Nuclear Arms Elimination program—Ukraine Weapons of Mass Destruction Infrastructure Elimination program—Ukraine	
2. Consolidate and secure FSU WMD and related technology and materials	**$165.8**
Nuclear Weapons Storage Security program—Russia Nuclear Weapons Transportation Security program—Russia Fissile Material Storage Facility program—Russia	
3. Increase transparency and encourage higher standards of conduct	**$21.0**
Biological Threat Reduction Project (BTRP)—FSU	
4. Support defense and military cooperation with the objective of preventing proliferation	**$45.5**
WMD-PPI program—FSU, except Russia Defense and military contacts	

SOURCE: DoD, 2006a.

place in the broader interagency community, especially with key allies, partners, and regional organizations.

DTRA officials have recognized these issues and created the new Security Cooperation branch, which is responsible for developing regional approaches. This branch is in the process of updating DTRA security cooperation strategy and improving DTRA internal coordination through a programs database. The next section starts to develop a process for dealing with these issues.

What Is an "Approach" to Building Partner Capacity?

For the purposes of this monograph, an approach to BPC for combating WMD is characterized by the mix of activities that collectively address the "ends" of combating WMD in a region. That mix includes U.S. and allied efforts that should, in theory and practice, all work in tandem to support the partner. For our purposes, an approach is *not* focused on program guidance, frequency of events, or event objectives, because these are issues found more at the operational or even the tactical level. Key characteristics of a successful approach include effective planning and implementation. Successful planning elements entail an understanding of the threat and potential partner needs, vulnerabilities, and interests; choosing the most relevant partners; building on common ground; and developing collaborative plans. Implementation should include executing events that reinforce key BPC for combating WMD concepts and enabling effective strategic communications between the United States and its partner countries.

On the planning side, a successful BPC approach would entail a thorough understanding of the WMD threat in a respective partner country—from the partner's and the United States' perspectives—because they do not always align. U.S. planners should also grasp the partner's current capabilities and the needs relative to those capabilities before determining which BPC activities are most appropriate. In terms of choosing relevant partners, because the United States has finite resources, it needs to ensure that it is focusing on the right partner countries for the right reasons, and executing its approach in such

a way as to maximize the impact for all involved. Chapter Three discusses several criteria that will help to enable planners to select the most relevant partners with which to work. Finally, developing collaborative plans within DoD and with other U.S. agencies and also sharing those plans when possible and appropriate with the respective partner will help to ensure that all players agree on the objectives for the approach.

On the implementation side, it is especially important for U.S. officials executing BPC for combating WMD activities, and indeed for broader security cooperation activities, to reinforce the same key concepts with the partner countries. Effective coordination and deconfliction in this area depend highly on the ability of the various program managers within DTRA, within DoD, and more broadly in U.S. agencies to work together and to share insights about what they plan to do, what they did, and especially any lessons they learned from the activity's execution. For example, during a DTRA ICP program workshop, the goal of an event might be to "socialize" (i.e., discuss) a new concept with the civilian border guard officials from Azerbaijan. That concept might entail encouraging the government of Azerbaijan to adopt interagency procedures to share information between the customs service and the border guards regarding vehicles crossing borders at key checkpoints. It would help other U.S. agency officials engaged with Azerbaijan—for example, the DOE SLD program or the Army CMEP program—to understand the concepts that are being encouraged by the DTRA ICP program so that DOE and Army efforts, for example, might be mutually reinforcing. The U.S. government should avoid sending conflicting messages to partners when it is trying to develop and enhance existing BPC for combating WMD relationships. Being on the same page conceptually will surely help the U.S. government to promote key ideas and themes in the partner country and in the region.

Challenges

To develop effective BPC approaches to combat WMD, there are several challenges to consider, including organizational roles and respon-

sibilities, harmonizing strategic guidance, and linking that guidance to program-level planning, execution, and an assessment process.

There is widespread recognition that WMD proliferation is a growing threat to U.S. national security. Building partner capacity to combat it is one way, we argue, that the United States can respond. But BPC in itself has some implicit challenges. For example, as discussed previously, U.S. government stakeholders are challenged with the problem of not knowing for certain if they are working with the right partners for the right reasons. This uncertainty is due in part to the fact that there are a number of separate organizations responsible for programs with very similar aims and methods, often operating in the same countries. Moreover, because there is no formal U.S. government or even DoD coordination mechanism, assessing the effectiveness of a given program at the country level is extremely difficult. The following section addresses two key questions DoD planners might ask when addressing these challenges:

- What are the roles of each program and what are the relationships between the programs and other programs inside and outside DoD?
- How should DoD attempt to harmonize the guidance so that it makes sense to program managers and then turn it into actionable plans to support the COCOMs?

Organizational Roles and Responsibilities

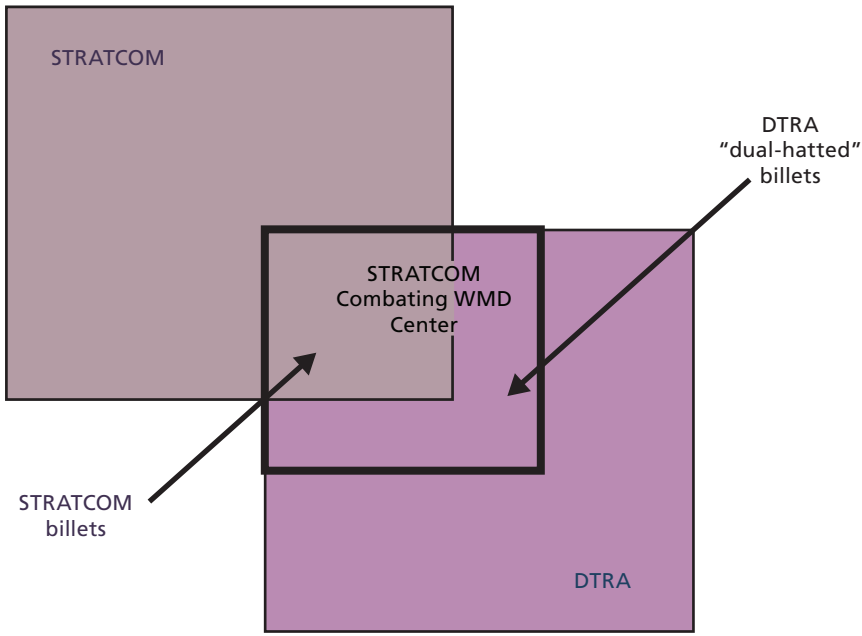
DoD planners are responsible for operationalizing national, OSD, and COCOM-level guidance; however, those documents are limited in terms of specific guidance on ways to pursue BPC for combating WMD.

Organizational challenges can arise because of the multitude of players within DoD working to execute combating WMD programs in accordance with OSD and COCOM guidance. An example of one such challenge can be found by examining the relationship between the U.S. Strategic Command (STRATCOM) Combating WMD Center (SCC), STRATCOM headquarters, and DTRA. STRATCOM is assigned as the "synchronizing" combatant command for combating

WMD, and in 2006, the Secretary of Defense approved the establishment of SCC, directing that the new organization draw largely on DTRA personnel and resources, as shown in Figure 2.3.[3]

As a result, many DTRA personnel are dual hatted, and the relationship between STRATCOM, SCC, and DTRA is confusing for the combatant commands, and even occasionally for those personnel assigned to the organizations. For example, STRATCOM officials suggested one of the most pressing needs for combating WMD planners is to have clearly defined roles and responsibilities.[4] This sentiment

Figure 2.3
STRATCOM, SCC, and DTRA Relationship



[3] See STRATCOM Web site, not dated, and Defense Threat Reduction Agency Web site, not dated, for descriptions of the various organizational roles of STRATCOM, DTRA, and SCC.

[4] Discussions with STRATCOM officials, Omaha, Nebraska, November 2007.

was echoed by U.S. Pacific Command (PACOM) officials as well and specifically reflected their frustration that there is no focal point within DoD for BPC for combating WMD.[5] Overcoming such challenges is an essential step in operationalizing BPC for combating WMD guidance within DoD.

DoD planners can play an important role in helping to break down organizational barriers, in a number of ways. First, they could cooperate with other DoD or U.S. Interagency partners in an attempt to reinforce key concepts or initiatives in the respective partner country or to build upon other agencies' efforts. For example, a DTRA ICP program field exercise might build upon the capabilities previously utilized in a CMEP tabletop exercise, provided the same agencies from the partner country are involved in both events. Overall, it is difficult to assess the ability of DoD to BPC for combating WMD because other U.S. government agencies also contribute to these efforts. In most cases, other departments, such as State and Energy, have the lead in working with a partner's civilian agencies to improve their willingness and capacity to combat WMD threats. As a result, coordination between DoD and other U.S. government agencies is critical, and it is important for DoD planners to understand these organizational roles and responsibilities when formulating an effective BPC for combating WMD approach. Without proper coordination, there is the danger that programs could work at cross-purposes.

Second, DoD planners could collaborate directly with other DoD or U.S. government partners to achieve common ends. In this case, the resources would be shared and the goals of all involved providers would be synchronized during the early stages of the planning conferences. An example would be the Georgia Train and Equip Program, in which 16 funding sources were combined by State Department and DoD officials to execute the program.

Third, DoD planners might provide the inputs or resources, such as money or manpower, directly to another U.S. government agency in an effort to achieve common ends. An example might be DTRA ICP program assistance to the State Department EXBS program in

[5] Discussions with PACOM officials, Honolulu, Hawaii, October 2007.

the Balkans or elsewhere in Eurasia on a specific border security initiative. Since DOE, the implementer of this program, has an abundance of nuclear expertise but is lacking in the chemical-biological expertise held at DTRA, this course of action might be appropriate.

Harmonizing the Guidance

DoD planners are attempting to understand and harmonize the department-level guidance in such a way as to prove meaningful to program managers. Such a harmonization of the strategic, operational, and tactical guidance is a necessary first step in assessing the effectiveness of DoD programs and activities, as discussed in Chapter Five.

Harmonizing guidance into coherent plans is an important role that DoD planners can and should play, at least for the agency itself, but also as a way to assist the COCOMs and the supporting agencies. As discussed briefly at the beginning of this chapter, there are multiple sources of combating WMD guidance at the national and department levels. Complicating the issue even more is the fact that U.S. counterterrorism guidance also addresses some aspects of combating WMD, particularly in relation to terrorist use of WMD (Leiter, 2008). DoD planners and program managers should understand the perspectives and priorities of its DoD partnering agencies and departments. Because functional plans at the COCOM level are driven by so many sources of guidance at the national and departmental levels, planners could greatly benefit from such an understanding of how the various desired end states and objectives are related to each other, and which are directly applicable to a specific region or threat.

Conclusion

This chapter has attempted to set the stage for the proceeding chapters, which describe in detail the four-step process for building regional BPC for combating WMD approaches. Numerous challenges from a variety of perspectives—such as stove-piped organizations and programs, lack of full visibility into other agencies' activities, and the difficulty of harmonizing guidance—were presented to provide credibility to the argu-

ment that a new approach to BPC for combating WMD is needed. The following three chapters provide the specifics of the four-step process for developing regional approaches to BPC for combating WMD.

CHAPTER THREE

Combating WMD by Tying Building Partner Capacity to the Threat

This chapter, along with the next two, attempts to lay out three rather difficult questions in a way that will prove meaningful to DoD planners, program managers, and implementers. These key questions are intended to help guide the discussion in developing regional BPC for combating WMD approaches relative to DoD security cooperation efforts:

- Where does the United States act and with whom should it partner?
- What does the United States do and how should it do it?
- How does the United States know that it has done the right things with the right partners in the right ways?

To answer these questions, we adopt a four-step process for developing regional approaches to build partner capacity to combat WMD threats. These steps include identifying desired end states and capabilities relative to the WMD threat, working with potential partners, identifying relevant BPC ways and means, and developing a framework to assess the effectiveness of BPC activities. This chapter addresses step one of the process, which comprises three elements: desired end states, capabilities, and partner relevance; each of these elements requires a thorough understanding of the WMD threat.

Identifying Desired End States Relative to the Threat

The first key question asks in part, "Where does the United States act?" To answer this, the BPC planner should first understand the threat. This understanding requires BPC planners to work closely in an ongoing process with regional experts and intelligence offices in an effort to understand what the potential WMD threats are, where they exist, how they are evolving, who is involved, and how they affect U.S. security interests. An understanding of these WMD threats will enable the BPC planner to identify which desired end state for combating WMD is being challenged; this desired end state will in turn guide the overall approach. In other words, there should be a clear objective in mind when considering whether to engage in activities to build a partner's capacity to combat WMD. To illustrate, the study team turned to NMS-CWMD, which offers nine broad desired end states, as shown in Table 3.1, that the United States would like to achieve. These are referred to as desired end states throughout this monograph.

Not all of the nine desired end states are directly applicable to building partner capacity. To narrow down the list, we considered each desired end state in light of two questions. First, does the desired end state specify action by U.S. forces? Because we are interested in capabilities that can be built within partner militaries, we set aside those desired end states that require action by only U.S. forces. Second, can the indigenous capacity be used by a partner country? We are interested in building indigenous capacity within a partner country's force structure and other national entities to enable that partner to better deal with its own WMD threats without outside assistance. Certainly, these capabilities could be used in a coalition or some other collective action, but that is not the primary concern in this case. Applying the two questions to each of the nine NMS-CWMD desired end states listed above reveals that only four of the desired end states from

Table 3.1
Overall Combating WMD Desired End States

The U.S. Armed Forces, in concert with other elements of U.S. national power, deter WMD use.
The U.S. Armed Forces are prepared to defeat an adversary threatening to use WMD and prepared to deter follow-on use.
Existing worldwide WMD are secure, and the U.S. Armed Forces contribute, as appropriate, to secure, reduce, reverse, or eliminate them.
Current or potential adversaries are dissuaded from producing WMD.
Current or potential adversaries' WMD are detected and characterized, and elimination is sought.
Proliferation of WMD and related materials to current and/or potential adversaries is dissuaded, prevented, defeated, or reversed.
If WMD are used against the United States or its interests, the U.S. Armed Forces are capable of minimizing the effects in order to continue operations in a WMD environment and assist U.S. civil authorities, allies, and partners.
The U.S. Armed Forces assist in attributing the source of an attack, respond decisively, and/or deter future attacks.
Allies, partners, and U.S. civilian agencies are capable partners in combating WMD.

Table 3.1 are directly relevant to BPC for combating WMD.[1] These include the following:

- Existing worldwide WMD is secure.
- Current or potential adversaries are dissuaded from producing WMD.

[1] It is important to note that several of the desired end states actually have multiple components. For example, the desired end state that requires that the existing worldwide WMD are secure and that the U.S. Armed Forces contribute, as appropriate, to secure, reduce, reverse, or eliminate it actually consists of two separate ideas. First, "existing worldwide WMD are secure." This first idea does not necessarily imply that it will be the United States that will secure WMD around the world; in fact, there may be others who will assist. The second part of the desired end state, "the U.S. Armed Forces contribute, as appropriate, to secure, reduce, reverse, or eliminate it [WMD]," however, is applicable to U.S. forces. As such, this part is not an appropriate BPC for the NMS-CWMD desired end state. As a result, only the first part of this desired end state is applicable to BPC.

- Proliferation of WMD and related materials to current and/or potential adversaries is dissuaded, prevented, defeated, or reversed.
- Allies, partners, and U.S. civilian agencies are capable partners in combating WMD.

Each desired end state is discussed in detail below.

Desired End State 1: Existing Worldwide WMD Is Secure

By "WMD is secure," we mean simply that legitimate WMD stockpiles are not vulnerable to theft or diversion. In the context of BPC, the United States may wish to assist a partner or even a potential adversary to build its capacity to achieve this desired end state. For example, the security of Russian nuclear materials has been the focus of U.S. assistance since the end of the Cold War; securing and managing the weapons, materials, personnel, and technologies has proven a formidable task. The United States has concentrated its WMD capacity-building efforts in Russia largely through the CTR and MPC&A programs. CTR has resulted in the removal of materials, physical protection of materials, material inventory verification, and training of technical professionals for positions in other industries. Installation of detection, monitoring, and protection devices—including walls, fences, alarms, portal monitors, radiation detectors, and inventory controls—also contributes to the security of these WMD materials (DoD, 2006a).

Similar concerns have been voiced over the threat of potentially unsecured nuclear weapons in Pakistan, and according to some reports, U.S. assistance to safeguard Pakistani weapons has been under way for several years (Warrick, 2007; Sanger and Broad, 2007). Other countries, such as China and India, perhaps pose less of a "loose nukes" threat. With approximately 130 nuclear warheads for delivery by land- and sea-based missiles or bombers and a further stockpile of roughly 200 warheads, China has what is believed to be the third largest nuclear arsenal in the world (Kristensen et al., 2006). China's generally tight grip on internal security, however, makes the likelihood of diversion of nuclear materials unlikely, although that could change if it experienced the disintegration of central control that the Russians did in the early

1990s. Moreover, by at least one estimate, India currently has 50–60 nuclear warheads, deliverable by ballistic missile and aircraft, and has produced enough weapon-grade plutonium for about 100 warheads (International Panel on Fissile Materials, 2007). With a smaller nuclear arsenal, some aspects of security are potentially made easier, including India's assertion that it disassembles its weapons during peacetime to prevent theft (Ferguson et al., 2004).

Desired End State 2: Current or Potential Adversaries Are Dissuaded from Producing WMD

This end state addresses individual states' decisions to pursue a WMD program. One example of a potential adversary being dissuaded from producing WMD is the case of Libya giving up its nuclear and chemical programs in 2003. Various explanations for this have been offered, ranging from the "demonstration effect" that the U.S. invasion of Iraq had on Libya, to the interception of the ship BBC *China* and its cargo of nuclear-related materials bound for Libya from Pakistan's A. Q. Kahn network,[2] to the long-term effect of multilateral economic sanctions (Bowen, 2006, p. 47). A. Q. Kahn's organization is worth mentioning because of its sheer audacity and scale. The network was global in scope, stretching from Germany to Dubai and from China to South Asia, involving numerous middlemen and suppliers. Uncovering and stopping the illicit activities of networks that assist a potential adversary in its quest to develop a WMD program can potentially have a dissuasive effect in and of itself.

Unlike Libya, with its relatively advanced WMD programs, Venezuela has apparently not yet made the decision to pursue a WMD program. Under Hugo Chavez, Venezuela is stridently anti–United States, and it is increasingly influential in the region. Areas of potential concern are Venezuela's well-documented interest in nuclear technologies and its growing partnership with Iran, to include possible nuclear cooperation ("U.S. Lawmakers," 2007). Efforts to dissuade Venezu-

[2] The A. Q. Khan network was central to all aspects of the Libyan nuclear weapons program, providing centrifuge designs and information on how and where to acquire additional components.

ela from pursuing a nuclear program may be difficult given the poor state of relations with the United States, but nonetheless are extremely important.

Desired End State 3: Proliferation of WMD and Related Materials to Current and/or Potential Adversaries Is Dissuaded, Prevented, Defeated, or Reversed

This end state addresses states' decisions to proliferate WMD to other states or nonstate actors. Preventing proliferation can take many forms, and it may include interdicting WMD or related materials in transit, eliminating an adversary's WMD on the battlefield, or using diplomatic means to persuade an adversary to reverse a decision to acquire such materials.

Preventing the transit of WMD depends largely on knowledge of how such materials might be moved. Trafficking routes in the Middle East, East Africa, and Central Asia are typically thought of in relation to drugs, small arms and light weapons, and human trafficking; yet, in 2006 alone, there were 149 reports of illicit trafficking of nuclear and radiological materials in these regions. While few involved the use of fissile material, the number of incidents involving radiological materials that could be used in a "dirty bomb" is substantial (IAEA, 2006). Porous borders and vast tracts of land that must be patrolled by small and often ill-equipped border control forces exacerbate the threat. Further compounding the problem is the dual-use nature of some WMD-related materials, and the difficulties that might easily arise in discerning legitimate trade from illicit trafficking. A diversion or theft of an otherwise legitimate shipment of non-WMD-intended materials (such as spent nuclear material or industrial chemicals) is one example; just as likely is the use of falsified documents or simple mislabeling of materials. In the Balkans, where illicit trafficking and organized crime are endemic, many states recognize that there is a plausible connection between WMD and other illicit networks. Regional initiatives, such as the May 2007 Proliferation Security Initiative (PSI) ADRIATIC GATE maritime interdiction exercise, demonstrate this concern (Government of the Republic of Slovenia, 2007).

Another example of what is meant by this desired end state is the actual defeat of an adversary's WMD weapons or WMD research or production facilities. In late 2007, the details of an Israeli air strike on a suspected Syrian nuclear facility were reported in the international media. Although it seems unlikely that such a program was fully realized, the incident highlights the potential for Syria to engage in WMD acquisition, particularly in light of reports that North Korean scientists were aiding them (Knowlton, 2008).

Finally, Brazil and Argentina each provide an example of a decision to acquire WMD being reversed. Between the 1940s and the 1980s, both countries entered into a competitive arms race, which included the exploration of nuclear technology and weapons. Since then, both countries have renounced their weapons programs, and they have been instrumental in the Treaty of Tlatelolco and maintaining Latin America's status as a nuclear weapons–free zone.

Desired End State 4: Allies, Partners, and U.S. Civilian Agencies Are Capable Partners in Combating WMD

Although the preceding three end states are somewhat more specific in suggesting capabilities that might be required to achieve them, this one is rather vague. In an ideal world, countries that partner with the United States would have a well-rounded capacity to combat WMD. Accordingly, this monograph proposes that such activities as consequence management, active defenses, and passive defense capabilities, and even offensive operations and battlefield elimination of WMD, be included in this desired end state.[3] Some examples of efforts to build this type of capacity with partners include the NATO Joint Chemical, Biological, Radiological, Nuclear (CBRN) Center of Excellence and the NATO CBRN Defense Battalion (NATO CBRN BN). The NATO Euro-Atlantic Disaster Response Coordination Centre (EADRCC) consequence management exercise IDASSA hosted by Croatia in 2007

[3] "Security cooperation efforts should not only, for example, focus on missile defense cooperation or the Proliferation Security Initiative (PSI), but should equally stress passive defense, elimination, and WMD consequence management cooperation, including efforts in multilateral fora." See Chairman of the Joint Chiefs of Staff, 2006, p. 21.

is typical of multilateral exercises aimed at building capabilities aligned with this desired end state (Government of Croatia, 2008).

Identifying Capabilities Relative to the Threat

Understanding which of the four desired end states are relevant can help focus U.S. efforts. It takes certain capabilities to pursue specific desired end states; therefore, desired end states can serve as indicators of what will be required to address a threat. For example, typical smuggling routes in the Caucasus link Russia to Turkey via Georgia or Azerbaijan, Russia to Iran via Armenia, Armenia to Turkey via Georgia, and South Caucasus states to Chechnya and Turkey. These established routes represent a proliferation threat, as evidenced by an incident in January 2006, when Georgian authorities arrested a Russian carrying 100 grams of highly enriched uranium (IAEA, 2007). Although this amount of weapons-grade material is relatively small, the very discovery of this material being trafficked is alarming. The point is that thinking about this specific threat in the context of desired end state 3, "proliferation of WMD and related materials to current and/or potential adversaries is dissuaded, prevented, defeated, or reversed," can suggest certain desired capabilities. The capability to detect highly enriched uranium might be one example, as would be the capability of border guards to properly identify the material, seize it, and conduct a thorough investigation. Moreover, it may be in the interest of the United States to work with Georgia to develop these capabilities through focused BPC efforts. Thus, identifying the types of capabilities that are required is an essential element of the first step of developing a regional BPC approach for combating WMD.

Understanding the nature of the threat along with the desired end states will help planners focus security cooperation resources on the right capabilities for the right reasons in the most effective ways. To demonstrate this, the study team conducted a two-day workshop to solicit expert comments on the four-step process for developing regional approaches. The participants were presented with specific threat sce-

narios and then asked to consider which types of capabilities would best help to address the threat posited in the scenarios.[4]

Two of the threat scenarios were related to the maritime proliferation of WMD materials. One group was presented with a scenario in which Iran had withdrawn from both the Nuclear Nonproliferation Treaty (NPT) and the International Atomic Energy Agency (IAEA). As a result, its nuclear activities were no longer under IAEA safeguards, and authorities suspected that a vessel departing the Port of Bushehr was carrying highly enriched uranium. Sources suggested that the material was being transferred to a violent extremist organization, possibly via the Port of Beirut. A second group was presented with a scenario in which a private charter vessel carrying a cache of stolen radioactive material had entered the Adriatic and was suspected to be headed to one of three ports on the Balkan coast: Vlora, Albania; Bar, Montenegro; or Ploce, Croatia. The material, it was believed, was sufficient for use in a radiological dispersal device (RDD), and authorities believed that once in port the material would then be routed overland to a terrorist group operating in the region.

In both cases, the workshop experts identified nearly two dozen capabilities that could potentially be used to address the hypothetical threat, focusing largely on maritime detection and interdiction. When asked to rank order the capabilities in terms of importance, the workshop experts consistently put maritime patrol craft and trained maritime border guards, along with equipment capable of detecting radioactive sources, at the top of the list. The first group also pointed out the need to address issues such as information sharing between partners and international agreements to facilitate cooperation and collabora-

[4] We conducted workshops with each of the geographic COCOMs (i.e., PACOM, U.S. European Command [EUCOM], CENTCOM, and U.S. Southern Command [SOUTHCOM]). We also invited officials from OSD, the Joint Staff, DOE, the Department of State (DOS), National Defense University, and DTRA to participate. Many of the invitees had participated in focused discussions with the study team concerning BPC activities and programs either overseen or conducted by their organizations. As a result, most participants were somewhat familiar with our study objectives. It is important to note that the workshops did not deal with Africa Command (AFRICOM) separately, because this study commenced prior to the standup of AFRICOM. African countries were addressed per the previous Unified Command Plan with their respective COCOMs.

tion. In the second group, the participants highlighted the importance of interagency coordination and collaboration as a way to ensure that all capabilities were brought to bear.

Moving away from the maritime interdiction discussion, a third group was presented with a scenario in which a terrorist organization had transported an RDD overland through Colombia and Panama.[5] The truck carrying the RDD approached the canal's Gatun lock and detonated the device using high explosives. As a result of the attack, the group was told, the canal would be effectively shut down until decontamination could be completed. Although the group suggested several capabilities related to the detection and interdiction of WMD materials, the focus of the discussion was on the capability to manage the consequences of the attack. For example, being able to isolate the contaminated area and rapidly provide specialized remediation teams would be essential. Additional consequence management capabilities that would be needed include evidence gathering, decontamination, and hazard modeling.

The point is that BPC planners can use a specific WMD threat to identify a specific desired end state that serves as a context for thinking about capabilities. In the first two scenarios, desired end state 3, "proliferation of WMD and related materials to current and/or potential adversaries is dissuaded, prevented, defeated, or reversed," is being challenged by specific maritime proliferation threats. This information then served as the context for identifying specific capabilities that the United States may wish to build with relevant partners, which leads to the second part of the question, "with whom should the United States partner?" This is the subject of the following section.

Relevance of Potential Partners

First, all countries are potentially relevant, primarily because any state could serve at least as a transit route for WMD or the materials and

[5] Some analysts suggest that Panama's most contentious national security issue is control of its border areas—particularly the border with Colombia (Mendel, 2001).

equipment that can be used to make them. To be sure, no state is irrelevant; rather some are more relevant to U.S. national security interests than others. Understanding the relevance factor will permit planners to choose between potential partners based on specific combating WMD threats.[6]

In addition to providing the context for identifying appropriate desired end states and capabilities, an understanding of the specific threat can also help the planner to identify relevant partners with which to build capacity. This is the second part of the first question we posed at the beginning of this chapter, "with whom should the United States partner?" DoD prioritizes partner countries for focused assistance by first considering a country's overall relevance to U.S. national security objectives. However, in addition to considering the priority of countries and regions identified by OSD in the Guidance for Employment of the Force, BPC planners should also consider the specific WMD threat that must be addressed. At the COCOM, for example, planners can do this by consulting, at a minimum, the relevant unclassified and classified literature and holding discussions with combating WMD, theater security cooperation, intelligence, and regional experts. All of these inputs can be supplemented by discussions with other U.S. government officials, those within the Intelligence Community, DoD, and functional experts on the Joint Staff or in OSD.

To illustrate how a country's relevance is tied to the threat, consider a country such as Pakistan. A potential partner's relevance may stem from its proximity to a proliferation source, or in Pakistan's case, the country may be a source of proliferation itself. Pakistan hosted (possibly unwittingly) the A. Q. Khan nuclear proliferation network, which illicitly transferred nuclear technology to North Korea, Libya, and Iran, making Pakistan a relevant partner if the threat we are considering is proliferation of nuclear technologies (i.e., desired end state 3) (GlobalSecurity.org, not dated). In addition, Pakistan's nuclear weap-

[6] DoD can contribute to establishing the relevance of partner countries for the department as a whole. This information can be provided by DoD to OSD/Global Threats and Partnership Strategy, with the goal of contributing to the Guidance for Employment of the Force (the Combating WMD portion in particular).

ons themselves may pose a potential proliferation threat under certain scenarios. Some sources estimate that Pakistan has between 60 and 120 nuclear weapons, which are stored in disassembled form at six secret sites (Nuclear Threat Initiative, 2008). If Pakistan's political turmoil leads to the central government losing control of the state, with that might come the loss of these weapons. This scenario suggests that Pakistan might also be a relevant partner in the context of a WMD security threat (i.e., desired end state 1).

The following are just some of the factors that might prove attractive to a terrorist group: proximity to ungoverned spaces, transit zones, criminal trafficking activity, radical groups that seek WMD, or populations that might be sympathetic to them or even temporary situations, such as hosting a large-scale special event. States with these types of vulnerabilities that can be exploited by a violent extremist organization may also be good candidates for activities that build the states' capacity to prevent proliferation (i.e., desired end state 3). There is extensive evidence that Al Qaeda network affiliates have attempted to acquire and weaponize CBRN agents, in addition to disseminating WMD technical information to supporters (Monterey Institute of International Studies, not dated).

Because of the wide range of known factors that could be applied to better understand a partner's relevance, the study team developed a set of criteria designed to assess a potential partner's relevance in the context of a specific threat and also to provide a level of consistency across all cases. The criteria are each related to geographical factors, including proximity to ungoverned spaces, proximity to proliferation sources, and proximity to established trafficking networks for other illicit commodities. To find specific indicators for the criteria, the study team used various open sources, including, for example, the Nuclear Threat Initiative proliferation database, the CIA World Factbook, and the DOE Energy Information Administration Web sites (Nuclear Threat Initiative, 2007; U.S. Central Intelligence Agency, 2008; DOE, not dated). Additional sources, at both the classified and unclassified levels, are available to BPC planners, allowing for even greater fidelity in assessing potential partners in light of these criteria. By applying these or similar criteria, DoD planners will be able not only to identify

the most relevant partners, but also to gain an understanding of how best to develop a BPC approach for those partners.

Conclusion

This chapter has examined the first step in the process for developing regional approaches, including the three elements of this step. The thread that runs through each of these elements is a thorough understanding of the threat. Once the threat is understood, the relevant desired end state that guides the approach becomes clear, as do the required capabilities to achieve it. Finally, planners can use criteria to determine a potential partner's relevance in the context of the threat. Chapter Four discusses steps two and three in the process: working with potential partners, and identifying relevant BPC ways and means.

CHAPTER FOUR

Working with Partners: What to Do and How to Do It

As discussed previously, it is important to identify and characterize the WMD threat, from both the United States' and the partner country's perspective. It also is important to understand the *willingness* of candidate partner countries to work with the United States and their current *capacity* to combat WMD threats. The key question this chapter addresses is: "What should the United States do and how should it do it?" To answer this question, this chapter discusses steps two and three of developing regional approaches to BPC for combating WMD: working with potential partners, and identifying relevant BPC ways and means.

Working with Potential Partners

Chapter Three showed how potential BPC partners can be identified by examining their relevance to a specific WMD threat. Planners also need to understand the U.S. relationship with the partners and their willingness and capacity to work with the United States in the context of combating WMD. Planners would then use this understanding in step two of the process as a way to identify potential roles for partners. The idea of identifying partner roles is based in part on a number of assumptions about building partner capacity (see Moroney et al., 2007; and Moroney, Grissom, and Marquis, 2007). In general these assumptions suggest that it is important to understand potential partners' cur-

rent capacity to address the threat and their willingness to work with the United States to build their capacity.

First, BPC assistance can enable partners to address domestic and regional problems, often without direct U.S. participation. This is important because in some cases, a partner's capacity is built to address a problem so that the United States can eventually focus its assistance elsewhere. Second, the level of a partner's capacity to combat WMD proliferation can be changed, to relative degrees, through focused BPC efforts. Third, coordinated and focused strategic communications can be a key enabler of BPC because they may affect a partner's willingness to work with the United States. DoD can help improve partner willingness, but the State Department, not DoD, is the lead in this area since this is more a function of foreign policy. Fourth, the U.S. military can have a tremendous impact on partner capacity, but other U.S. government agencies can also improve capacity. Fifth, combating the capabilities of WMD of interest to both the United States and the partner is more likely to be sustained over time, given that U.S. resources are not infinite and partners often have to assume much of the sustainment costs. From the U.S. perspective, sharing ideas is a necessary first step to ensure that follow-on activities are supported by the partner and address a partner's needs. For example, one former Russian official opined that only about 20 percent of all U.S. CTR assistance is actually necessary from the Russian point of view.[1] He contended that if the United States cut off CTR assistance today, Russia could easily assume responsibility for the cost of the portion it believed to be important. Clearly, U.S. assistance is more likely to be sustained if the partner government also sees value in the activity.

Sixth, a prospective partner will probably be more interested in developing combating WMD capabilities that have indigenous applications, increase its regional or international prestige, and/or support its military transformation and modernization efforts. Finally, the strength of a partner's support for U.S.-led operations and activities can be an indicator of the extent to which that partner's international views coincide with those of the United States.

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[1] Discussion with former Russian lieutenant general, Moscow, Russia, June 2007.

Based on these assumptions, the study team developed a way to enable U.S. planners to characterize potential partner states according to their willingness and capacity.

Willingness. By willingness, we mean the potential partners' willingness to work specifically with the United States to address WMD threats. Ideally, DoD would focus its BPC efforts on the partners that are most relevant to a specific WMD threat, as discussed in Chapter Three, and the most willing to work with the United States to build their capacity for combating WMD. Not all relevant countries are willing; but even if a partner is not willing to work with the United States, proliferation problems may still be addressed through some other means. For example, DoD officials may need to find other partners in the region, such as regional or international organizations, to engage highly relevant partners if they are not willing to work directly with the United States.

Capacity. Understanding a partner's capacity to combat WMD requires a deep appreciation of not only its political and economic situation, but also its ability to secure its own borders and facilities, provide law enforcement interdiction and investigation capacity, work with its neighbors to address threats in a combined way, and so on. Therefore, subject matter expertise is required to understand the perspective of the partner country and to fully appreciate how the WMD threat is perceived, its capacity to counter the threat, and any gaps it has that could be filled appropriately by U.S. BPC assistance.

Criteria for Evaluating Capacity and Willingness

Much like the partner relevance criteria and indicators described in Chapter Three, it is possible to develop criteria and identify indicators of a partner's willingness and capacity. The study team grouped these criteria under two general categories: (1) political criteria and (2) combating WMD stance. Since many of the criteria cannot be measured directly, the team looked for indicators that could help provide insight and a way to gauge the level to which a potential partner meets the various criteria. Table 4.1 summarizes each of the political and combating WMD stance criteria and shows their relationship to willingness and capacity.

Table 4.1
Criteria for Assessing Willingness and Capacity

Category	Capacity Indicator	Willingness Indicator
Political criteria		
Degree of internal governance	√	
Degree of regional influence	√	
Ties to proliferating states		√
Combating WMD stance		
Ability to control borders	√	
Indigenous WMD programs	√	
Technical/scientific capability	√	
Congruence with U.S. combating WMD priorities		√
Participation in regional and global nonproliferation initiatives		√
Willingness to enact and enforce export controls		√

In the first category in the table, we consider criteria such as degree of internal governance, degree of regional influence, and ties to proliferating states. The first two criteria are useful in providing insight into a potential partner's willingness to work with the United States. Open sources can be used to measure a potential partner against these criteria.[2] Indicators of the level of internal governance, for example, can be found in the World Bank Governance and Anti-Corruption database online (World Bank, 2008). Sample indicators used by the study team to assess the level of internal governance include a given country's percentile (when compared with all other countries) for "rule of law" and "control of corruption." Table 4.2 shows how a set of countries can be measured against this criterion using multiple indicators and compared with the United States.

[2] However, as mentioned in Chapter Three, U.S. government BPC planners will have a more robust set of resources to draw on when measuring against these or other criteria.

Table 4.2
Measuring the Level of Internal Governance

Country	Year	Rule of Law Percentile Rank	Control of Corruption Percentile Rank
United States	2007	91.9	91.3
Country A	2007	28.1	36.7
Country B	2007	55.2	58.9
Country C	2007	48.1	44.4

NOTE: The scale for the percentile rank is 0 to 100.

Using the percentile rankings shown in Table 4.2, it is possible to think in terms of "high, medium, or low" levels of internal governance. The United States, close to the 90th percentile for both rule of law and control of corruption, may therefore be thought of, in this limited sense, as having a "high" level of internal governance. In comparison, Country B ranks in the top half ("medium"), whereas Country A and Country C rank in the bottom half ("low"). Similarly, indicators for evaluating regional influence might include gross domestic product relative to other regional countries, leadership roles in regional organizations, or even levels of imports and exports of goods. Table 4.3 summarizes the political criteria and some potential sources that may be consulted in order to develop indicators.

In the second category in Table 4.1, "Combating WMD stance," we consider criteria such as indigenous WMD programs, overall border security capacity, gauging technical and scientific indigenous capability, congruence with U.S. WMD priorities, participation in regional and global nonproliferation initiatives, and willingness to enact and enforce export controls. Some of these criteria are more straightforward to measure than others, which require substantial regional or functional expertise and judgment. For example, "participation in regional and global nonproliferation initiatives" and "willingness to enact and enforce export controls" are relatively easy to observe. In other words, a country either participates in a nonproliferation initiative like PSI or

Table 4.3
Open Sources Used to Develop Indicators for Political Criteria

Criteria	Sources for Indicators
Level of internal governance	World Bank governance database used to compile information on corruption and rule of law
Degree of regional influence	World Trade Organization statistics on gross domestic product per capita, with the assumption being that a very poor state will not be very influential in the region as compared to a wealthy state
Ties to proliferating states	Regional organizations and also the World Trade Organization country reports, which show each country's major trading partners

the Global Initiative to Combat Nuclear Terrorism (GICNT) or it does not. Likewise, a country either participates in an export control regime or not. It is also possible to look at a potential partner's participation in other nonproliferation arrangements, such as the NPT, the Nuclear Suppliers Group (NSG), or the Chemical Weapons Convention (CWC). Such participation might indicate some level of congruence with U.S. WMD priorities. Table 4.4 illustrates how these criteria might be measured.

In the example in Table 4.4, Country A, Country B, and Country C each participate in the NPT, the CWC, and the Biological and Toxin Weapons Convention (BTWC), indicating a general congruence with U.S. WMD priorities. Each of the three countries has complied with the requirement to submit a national report as required by UNSCR 1540, possibly indicating a willingness to enforce export controls on WMD materials. However, of the three countries, only Country B participates in any of the export control regimes.[3] This suggests that Country A and Country C may have a lower level of willingness to enact and enforce export controls.

[3] These include the NSG and the Zangger Committee, both of which control nuclear-related materials; the Australia Group (AG), which controls chemical materials; the Missile Technology Control Regime (MTCR), which controls some WMD delivery systems; and the Wassenaar Arrangement, which controls chemical, nuclear, biological, and dual-use materials. Not included are nuclear weapons free zones (NWFZs).

Table 4.4
Congruence with U.S. Combating WMD Priorities

State	Nuclear Nonprolif-eration Treaty	Chemical Weapons Conven-tion	Biological and Toxin Weapons Convention	Nuclear Suppliers Group	Zangger Commit-tee	Australia Group	Missile Technology Control Regime	Wasse-naar Arrange-ment	Nuclear Weapons Free Zone	IAEA Nuclear Safe-guards	IAEA Additional Protocol	UNSCR 1540 Compli-ance
United States												
Country A												
Country B												
Country C												

NOTES: Green indicates participation; yellow indicates that a country has expressed intent to participate.

Together, these three "combating WMD stance" criteria along with an evaluation of a country's ties to proliferating states (a "political" criteria) can suggest the overall willingness of a potential partner to work with the United States.

Developing indicators for the remaining three "combating WMD stance" criteria is more difficult, and it should be said that they require substantial expert judgment and intelligence analysis. Whether or not a country has an indigenous WMD program will most often be a matter of open record, but it can be ambiguous if a country wants it to be, as for example, is Israel's suspected nuclear weapons program (Metz, 1990). The "ability to control borders" may be a bit like proving a negative. In other words, the absence of any significant WMD proliferation across a country's borders may be the result of that country's ability to control the borders, it may simply be luck, or worse, a lack of awareness. The BPC planner must coordinate closely with regional experts in order to assess these criteria.

Indicators of "technical and scientific capability" may be slightly more concrete. For example, looking at World Trade Organization data can reveal a country's levels of imports and exports, along with the nature of these goods (World Trade Organization, not dated[b]). A country with a high technical and scientific capacity will generally be found to export technical or scientific items, whereas a less capable partner will not. Together with the political criteria of internal governance and regional influence, these three criteria can suggest the overall capacity of a potential partner to combat WMD threats.

Table 4.5 summarizes the criteria and some potential sources that may be consulted to develop indicators.

Notional Evaluation of Potential Partners

To illustrate more fully how DoD planners might use this process, we notionally identified several countries as potential partners for BPC for combating WMD assistance. This rather narrow selection of potential partners is meant to be *illustrative*. Drawing on the discussion of WMD threats and relevance in Chapter Three and RAND's regional experts, we selected four sets of "relevant" countries from each

Table 4.5
Open Sources Used to Develop Indicators for Combating WMD Stance Criteria

Criteria	Sources for Indicators
Indigenous WMD programs Overall border security capacity	Many sources, including, for example, the Nuclear Threat Initiative proliferation database, the CIA World Factbook, and the DOE Energy Information Administration Web site.
Gauging technical and scientific indigenous capability	World Bank export/import figures
Congruence with U.S. WMD priorities	Participation in major nonproliferation treaties
Participation in regional and global nonproliferation initiatives	Participation in PSI and GICNT
Willingness to enact and enforce export controls	Participation in export control regimes and compliance with UNSCR 1540

of the geographic COCOMs focused on in this study. Table 4.6 summarizes the hypothetical threats and the illustrative potential partners.

For each of the countries in the list of illustrative relevant potential partners, we considered the political and combating WMD stance criteria using indicators discussed in the previous section to gain insight

Table 4.6
Illustrative Threats and Relevant Potential Partners

Illustrative Threat	Relevant Potential Partners
Maritime proliferation of WMD materials	Country A Country B Country C
WMD attack against a shipping lane choke point	Country D Country E
Maritime proliferation of WMD material through a shipping lane	Country F Country G
WMD attack against a strategic shipping lane	Country H Country I Country J

into the potential partners' willingness to work with the United States and their current capacity to counter a WMD threat. In some cases, we used a "high, medium, low" score to indicate the degree to which we believed the potential partners met the criteria. In those cases, and using the open sources indicated in Tables 4.3 and 4.5, the study team assigned a numerical value to each possible answer, with "high" equaling 3, "medium" equaling 2, and "low" being equal to 1. In other cases in which the answer is binary, i.e., "yes or no," such as in whether or not a partner has an indigenous WMD program, we assigned a score of 3 to "yes" and 1 to "no."

The study team examined each of the ten potential partners, using indicators for each of the capacity and willingness criteria. The following discussion uses Country A as an example of how this analysis was accomplished and is representative of the data in Tables 4.7 and 4.8 for the other countries.

Regarding the capacity criteria in Table 4.7, the first criterion in the political category is "level of internal governance." We saw in Table 4.2 that Country A fell in the bottom third percentile for both of the indicators (i.e., "rule of law" and "control of corruption"). Correlating the top, middle, and bottom third percentiles with a "high, medium, low" ranking system, Country A's bottom third percentile equates to a "low" score for "level of internal governance." The next capacity criterion, "degree of regional influence," is also in the political category, and the study team used a regional comparison of potential partners' gross domestic product (GDP) as an indicator. Country A's GDP is about 9 billion U.S. dollars, compared to Country B's 40 billion U.S. dollar GDP and Country C's GDP of about 2.5 billion U.S. dollars (World Trade Organization, not dated[a]). Accordingly, in comparison to each other, Country A ranks "medium," while Country B ranks "high" and Country C ranks "low."

The next three criteria in Table 4.7 are related to the potential partners' combating WMD stance. Based on the judgment of RAND regional experts, Country A was assessed to have a "medium" degree of ability to control its borders, as were Country B and Country C. This

Table 4.7
Illustrative Evaluation of Capacity

Country	Level of Internal Governance	Degree of Regional Influence	Ability to Control Borders	Indigenous WMD Programs	Technical/ Scientific Capability	Overall Capacity Score
Country A	Low	Med	Med	No	Low	1.4
Country B	Med	High	Med	No	Med	2
Country C	Low	Low	Med	No	Low	1.2
Country D	Med	High	Low	No	Med	1.8
Country E	Med	Med	Med	No	Low	1.6
Country F	Low	Low	Low	No	Low	1
Country G	Low	Low	Low	No	Low	1
Country H	Low	Med	Low	No	High	1.6
Country I	Med	High	Low	No	High	2
Country J	High	High	Med	No	High	2.4

assessment was based in part on the fact that despite efforts to strengthen border security, illicit trafficking routes continue to operate throughout the region.

Turning back to the World Trade Organization Trade Profiles Database, we see that a comparison of import and export data can serve as one indicator of a country's technical and scientific capability. This assumes a correlation between exports of goods and the scientific and technical capability to produce them. For example, Country A ranks in the bottom quartile in terms of overall exports of merchandise, with the total value of its exports at about 750 million U.S. dollars. In terms of comparison, Country C ranks only slightly higher, with a total value of exports at about 800 million U.S. dollars; while Country B ranks in the top third, with exports valued at over 10 billion U.S. dollars. Thus, Country A and Country C may be thought of as "low" in terms of technical and scientific capability, while Country B may be thought of as "medium."

Table 4.8
Illustrative Evaluation of Willingness

Country	Ties to Proliferating States	Congruence with U.S. Combating WMD Priorities	Participation in Regional and Global Nonproliferation Initiatives	Willingness to Enact and Enforce Export Controls	Overall Willingness Score
Country A	No	Yes	High	Med	2.75
Country B	No	Yes	High	High	3
Country C	No	Yes	High	High	3
Country D	No	Yes	Low	Med	2.25
Country E	No	Yes	High	Med	2.75
Country F	No	Yes	Low	Med	2.25
Country G	No	Yes	Med	Low	2.25
Country H	No	Yes	Low	Med	2.25
Country I	No	Yes	Low	Med	2.25
Country J	No	Yes	Med	Med	2.5

Moving to the willingness criteria shown in Table 4.8, we see that the final political criterion is "ties to proliferating states." By looking at major trade partners as an indicator of ties, we find that Country A does not have substantial ties to proliferating states. The remaining three criteria have already been discussed, but an explanation of the scoring is warranted. For "congruence with U.S. combating WMD priorities," the team examined participation in the three major nonproliferation treaties (NPT, CWC, and BTWC) as an indicator. Participation in all three equates to a "high" score, participation in two earns a "medium," and in one or none, a score of "low." Country A participates in all three. Similarly, participation in the PSI and GICNT are indicators of "participation in regional and global nonproliferation initiatives." Participation in both scores a "high" ranking, participating in one of the two earns a "medium," while no participation scores a "low" ranking. Country A participates in both and was therefore ranked "high."

Finally, for the criterion, "willingness to enact and enforce export controls," the study team chose participation in one or more export control regimes as an indicator.[4] A second indicator for this was the submission of a national report as required by UNSCR 1540.[5]

The results of this analysis were averaged with no weighting, and they resulted in an overall capacity score for Country A of 1.4 and an overall willingness score of 2.75. This analysis was repeated for each of the countries with the results for each potential partner shown in Tables 4.7 and 4.8. Using the composite scores, we placed the countries in the appropriate quadrant of a two-by-two matrix, with willingness on the x-axis and capacity on the y-axis.[6] This approach enabled us to characterize each country in terms of its potential BPC role (i.e., least likely partner, most appropriate partner, potential regional leader, and potential impediment), as shown in Figure 4.1 (placement on the matrix is approximate).

Overall, when we applied the criteria, we determined that each of the illustrative partners is likely to be willing to work with the United States in some capacity in a security cooperation context. However, most of the countries also seem to have a low current capacity to combat WMD on their own. We determined that the countries identified in the lower right quadrant of Figure 4.1 are the most appropriate BPC partners from the perspective of building indigenous capacity. In addition, those countries with a higher degree of capacity, in the upper right quadrant, could make the best regional leaders, given the right circumstances, which depend on regional dynamics. For example, in the case of the maritime proliferation threat scenario, the United States may consider working with Country B as a regional partner to build capacity

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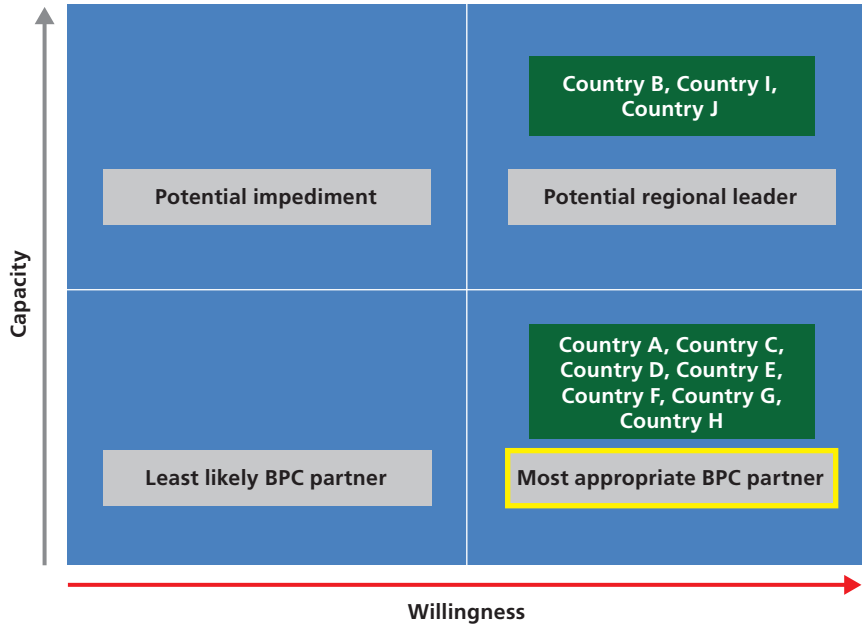
[4] These include the Nuclear Suppliers' Group, the Zangger Committee, the Wassenaar Arrangement, the Australia Group, and the Missile Technology Control regime. Importantly, European Union member states are required by EC 1334 to enact legislation equivalent to the controls set forth by these export control regimes.

[5] UNSCR 1540 requires states to adopt export control legislation based on the control lists developed by the various export control regimes.

[6] Placement on the chart is not exact.

Figure 4.1
Illustrative Characterization of Potential Partners



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in Country A and Country C. In this case, DTRA, through its ICP program, could provide *direct assistance* to either Country A or Country C with OSD support, on a bilateral basis, or both on a multilateral basis. DoD could provide this assistance on a unilateral basis, or it could work through the respective geographic COCOM, which is largely the way that DoD provides assistance to partners today.

Alternatively, DoD planners might work through another partner, such as Country B or even an international or regional organization, to provide such assistance. An example of this is DoD financial support to the Organization for Security and Cooperation in Europe to conduct border security assessments in Central Asia.[7] In that case, DoD officials apparently recognized that OSCE is in a good position to assess the border security situation in Tajikistan. OSCE had a number

[7] Discussions with OSCE border security officials, Vienna, Austria, May 2007.

of advantages, including its permanent presence on the ground and the fact that Tajikistan is a member of OSCE, and as such, Tajikistan tends to be more willing to provide access to sensitive information.[8] Similarly, in the strategic shipping lane WMD attack scenario (recall Table 4.6) in addition to building their capacity, BPC planners may consider working with or through Country I and Country J as regional leaders to build combating WMD capacity in Country H.

The study team's analysis suggests that both of the above approaches may work in certain situations. Wider visibility into the activities of other DoD entities, U.S. agencies, allies, and international and regional organizations will help program managers and planners to determine the most appropriate approach.

Identifying Ways and Means to Build Partner Capacity to Combat WMD

Step three of the process for developing regional BPC for combating WMD approaches focuses on selecting the appropriate ways and means to build capacity. Identifying these ways and means and applying them to the right partners in the right way will allow the BPC planner to answer the second key question, "What should the United States do and how should it do it?" Moreover, comparing the ends, as discussed in step one, with the ways and means can serve to provide insight into where, and how vigorously, a given end is being pursued.

Building Partner Capacity "Ways"

The study team identified ten different categories of security cooperation activities—or "ways"—that can support BPC goals. These ways describe how the activities are conducted and are useful in understanding the scope and nature of an activity. The ten ways are

- training
- conferences/workshops/information exchanges

[8] Ibid.

- defense and military contacts
- needs and capabilities assessments
- exercises
- equipment/infrastructure
- education
- personnel exchanges
- RDT&E
- experiments.[9]

While DoD programs as a whole cover all of the ways, DTRA focuses the majority of its activities on the ways of training, workshops and seminars, assessments, provision of equipment, and RDT&E. These ways represent the building blocks to develop approaches to work with partners, and they form a useful construct to gain insight into the nature of various BPC activities.

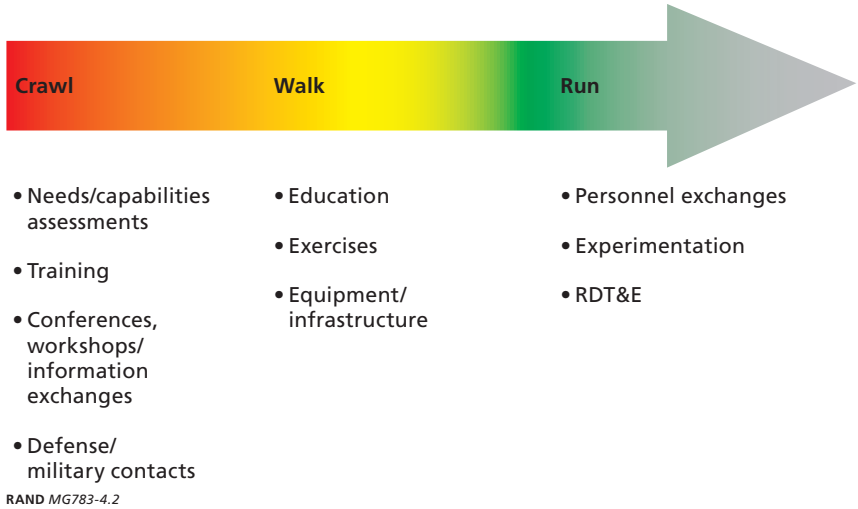
A further distinction regarding the character of the ways can also be made. Grouping the ways in terms of the outcome they strive to achieve provides additional insight into the depth and purpose of the relationship between the United States and a partner country. These ways can be applied at different intervals in a relationship with a given partner country. For example, when the United States is only beginning to develop its relations with a partner in a combating WMD sense, the "crawl" phase—which includes assessments, training, conferences, and developing defense and military contacts—may be most appropriate. Training, for example, can be designed to teach a student a specific task, such as how to operate a radiation detector. However, as the relationship matures and trust is built, it might be more appropriate to move the relationship further through education, exercises, and provision of equipment types of activities—or the "walk" phase. Education, for example, might involve a course of instruction aimed at develop-

[9] These ways are based on the security cooperation ways discussed in Marquis et al., 2006, which include education and training, military-to-military contacts, military-to-military personnel exchanges, standing forums, military exercises, RDT&E, international support arrangements and treaty compliance, materiel transfer, and technical training. They are also substantiated by the "tools" for security cooperation identified in current OSD guidance documents.

ing a student's in-depth knowledge of an issue area, such as consequence management. Such a course might result in the graduate being able to develop strategies or plans for a national response to WMD-related disasters. Finally, the "run" phase—which includes personnel exchanges, experiments, and RDT&E—is generally reserved for more capable allies for which improving interoperability, rather than building indigenous capacity, is the primary focus. For example, in addition to its ongoing internal RDT&E efforts to develop technologies to combat WMD, DTRA maintains R&D collaborative activities with key allies such as the UK. The relationship between the various BPC ways is depicted in Figure 4.2.

Generally, the ways are building blocks that should become more robust over time; activities in the earlier phases can certainly remain appropriate even in the later phases. For example, in the crawl stage, a partner might be asked to participate in a DoD Regional Center conference on combating WMD proliferation. In contrast, a partner in the walk or run phase might be asked to host and/or provide speakers for such an event.

Figure 4.2
BPC for Combating WMD Ways



There are, of course, some gray areas and overlap among the phases. There may well be good reasons why DoD could conduct more advanced activities with a country with which it does not have an established relationship—in the crawl phase. For example, the partner may be invited to observe a multilateral exercise. Observing an event is considered a less robust level of participation. However as a general rule, DoD does not conduct exercises with partners that have not been exposed to some training opportunities.

Moreover, it may be desirable for the United States to conduct needs or capabilities assessments later in the relationship, rather than during the crawl phase, depending on how open the partner is to U.S. inspections or analysis of its specific capabilities. Sometimes such in-depth assessments can occur only after additional trust has been built.

Assessing a partner's capability and capacity is more difficult. Tools that can help include assessments of capabilities, exercises that evaluate training objectives, and in some cases conferences, workshops, and information exchanges. Collaborating with partners is perhaps the most advanced way to build partner capacity, and it represents a significant investment of U.S. resources and often demands a high degree of commitment from the partner. These types of activities include personnel exchanges, experimentation, and RDT&E programs. Conferences, workshops, and information exchanges can also serve as fora for collaboration, and they can be thought of as being in this category as well.

U.S. Relationship with a Potential Partner Suggests Appropriate Ways

It is important to consider which ways are appropriate given DoD's relationship with a partner country. Understanding the sequencing of the activity or the relationships of the activity to, or its dependence on, other activities is important (i.e., is it part of a set or sequence of activities, for example, train/equip followed by an exercise?). The various ways of building partner capacity can be organized to resemble a spectrum or building block approach and tied to the nature of the U.S. relationship with a partner country. In essence, as discussed in the previous section, less mature relationships call for simpler activities that serve to open doors and help to mature the relationship. In general, the

United States can expect that partners with more-developed relationships will want to engage in more-sophisticated activities.

The challenge for the BPC planner is to gauge the nature of the relationship with a potential partner before beginning a program with that country. Much like the relevance, willingness, and capacity criteria, the nature of relationships with partner countries is not easily measured. Therefore, the study team developed an illustrative set of criteria to attempt to evaluate the nature of the relationship as shown in Table 4.9. The open sources used to develop these criteria provide a general sense of the relationship; DoD planners have access to a broader set of resources—i.e., the Intelligence Community and regional experts—and could develop an even more robust set of criteria than is presented here.

The maritime WMD proliferation scenario provides an example of how potential partners in a region may have varied relationships with the United States. Table 4.10 illustrates how a BPC planner might respond to the statements in Table 4.9. Using multiple indicators to describe the nature of the relationship is important, since looking at just one indicator for a given criteria may not show the whole picture. For example, while Country A, Country B, and Country C all participate in PSI and GICNT, there are significant differences in the degree to which they would support U.S. coalition operations. Table 4.10 summarizes the indicators for each of the three potential partners and indicates the assessed nature of the relationship.

Table 4.9
Criteria for Characterizing U.S. Relationships with Potential Partners

Participation in a U.S.-nonproliferation initiative such as the PSI
Contributions to U.S.-led coalition operations (personnel and nonpersonnel, e.g., logistics support)
Bilateral free trade agreement with the United States
Level of U.S. foreign assistance
Level of current BPC for combating WMD activities (compared with the rest of the region)

Table 4.10
Illustrative U.S.-Partner Relationships

Country A (Walk)
Participant in PSI and GICNT
Mid-level participation in U.S.-led coalition operations
No bilateral free trade agreement with the United States
Moderate levels of U.S. foreign assistance
Moderate level of BPC for combating WMD activities (compared to region)
Country B (Walk)
Participant in PSI and GICNT
Nontroop contribution to U.S.-led coalition operations
No bilateral free trade agreement with the United States
Low levels of U.S. foreign assistance
Relatively low level of BPC for combating WMD activities (compared with others in the region)
Country C (Crawl)
Participant in PSI and GICNT
No participation in U.S.-led coalition operations
No bilateral free trade agreement with the United States
Low levels of U.S. foreign assistance
Very low level of BPC for combating WMD activities (compared with others in the region)

Country A was assessed to have a "walk" relationship with the United States, based in part on the variety of BPC for combating WMD activities in which it participates. EXBS has established and is maintaining an export control and enforcement system, focusing on implementation of comprehensive export control legislation, emphasizing government-to-industry outreach, and enhancing the ability to enforce its export controls and border security (U.S. Department of State, not dated[a]). International Border Interdiction Training (IBIT)

is being conducted in conjunction with EXBS. Country A participated in a CMEP regional workshop and a regional tabletop exercise.[10] The ICP program, a DoD effort to provide training, equipment, and conduct WMD interdiction exercises, conducted several training courses as well as multiple planning and assessment visits.[11] Finally, the National Guard State Partnership Program (SPP), which pairs states with National Guard counterparts in partner countries, conducted demonstrations of U.S. WMD consequence management capabilities and a seminar on techniques to secure borders.

Country B was also assessed as having a "walk" relationship with the United States. Country B has participated in CMEP regional tabletop exercises, while the ICP program conducted numerous training courses and planning and assessment visits. Notably, Country B hosted a consequence management field exercise as well as a PSI exercise.

In contrast, the study team assessed Country C as having a "crawl" relationship with the United States as a result of its relatively nascent engagement in BPC activities. For example, the ICP program conducted two training courses for a few dozen participants, with some representatives attending a course in another country.

In summary, considering the relationship a potential partner has with the United States can provide insight into the ways that might be used to build partner capacity. We made the observation that the United States was assessed to be in a "walk" relationship with Country A and Country B, but not with Country C. Using the illustrative discussion above as a starting point for a regional approach, BPC planners might decide it may be appropriate to include exercises with Country A and Country B. The objectives of such exercises should attempt to develop the capabilities identified in relation to the threat and, therefore, might include efforts to establish trust, facilitate Country A and Country B's international and interagency cooperation, develop solutions for regional capability shortfalls, and ensure interoperability of equipment and clarity of interagency roles and responsibilities.

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[10] CMEP is a U.S. Army program to provide consequence management assistance though training and exercises.

[11] DoD partners with the FBI and DHS to implement the ICP program.

Moreover, such exercises might use a building block approach, i.e., starting with a tabletop exercise and then following with a field training exercise, depending on the partners' level of interest. It might be appropriate to include other relevant countries in the region in these exercises if they are willing to participate. Country C might be an appropriate participant in such an event, even though the United States has only a "crawl" relationship with this partner. Additionally, regional organizations and other stakeholders could observe or participate as appropriate.

Building Partner Capacity "Means"

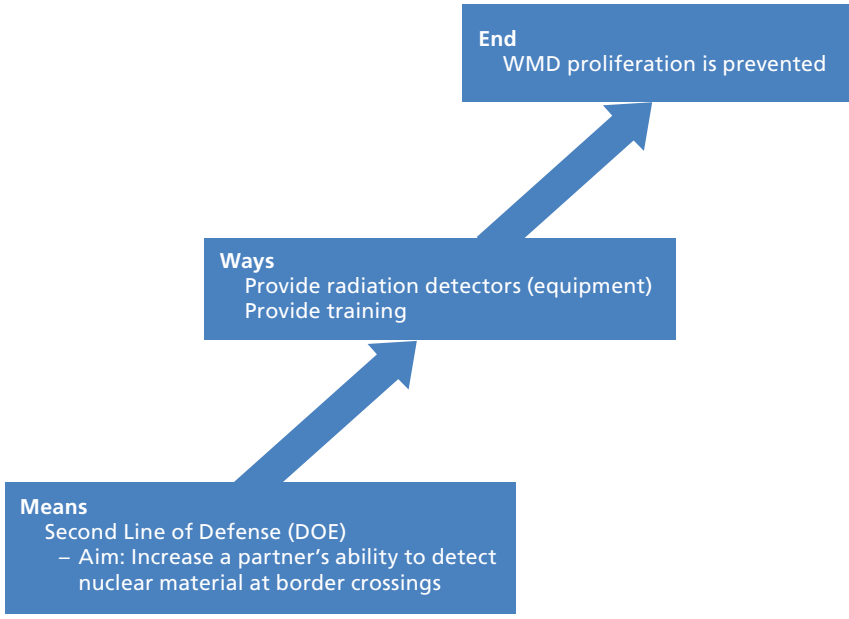
BPC programs are the specific "means" of achieving a *desired end state*. Using the various "ways" described above, these activities attempt to achieve specific *ends*. The study team identified 45 such programs with aims that support the BPC for combating WMD desired end states.[12] Figure 4.3 illustrates this concept of tying the ends, ways, and means for the purpose of this analysis.

To gain an understanding of the types of BPC for combating WMD activities undertaken globally, the study team conducted focused discussions with representatives from DoD and other U.S. government agencies, as well as select officials from key partners, allies, and regional organizations.[13] The team met with officials from organizations in the EUCOM area of responsibility. In Vienna, the team consulted with OSCE, NATO, and SHAPE officials, including the OSCE Forum on Security Cooperation and Border Security offices, and the NATO Euro-Atlantic Disaster Response Coordination Center. The team also met with officials from the government of the United Kingdom (the

[12] The Science Applications International Corporation study team identified these activities and provided the results to the RAND team. The linking of activities to specific desired end states and ways was a collaborative effort.

[13] Within DoD, the team contacted personnel in OSD, the Joint Staff, EUCOM, PACOM, SOUTHCOM, and the Defense Intelligence Agency. The team also gathered information on programs conducted by the Departments of State, Homeland Security, and Energy (to include the National Nuclear Security Administration). See the Appendix for a list of participating agencies.

Figure 4.3
Example of BPC Activities That Support a Combating WMD Desired End State



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Ministry of Defence and the Foreign and Commonwealth Office) and the government of Croatia.

The team built a detailed database of activities (see the Appendix). The database is organized by the controlling agency, country, or organization; it includes a brief description of the program, the *desired end states* it contributes to, and the *ways* it employs. Table 4.11 provides an example of the database structure.

This limited sampling of allies and partners illustrates a necessary step for planners to take in understanding the full picture of BPC for combating activities in a given region, and as such should be greatly expanded in practice.[14] The point is that it is important to understand

[14] With more time and resources, the team would have conducted additional meetings; likely next choices for such meetings would have been France, Germany, and the Czech Republic.

Table 4.11
Example of BPC for Combating WMD Programs and Activities Database Relates Ends, Ways, and Means

Department of Defense			
Program/ Activity	**Description**	**Ends**	**Ways**
ICP	DoD effort to provide training, equipment, and conduct WMD interdiction exercises. DoD partners with DOJ (FBI) and the DHS Bureau of Customs and Border Protection to implement the program.	3, 4	B, D, F

NOTES: The "ends" are listed in Chapter Three. The "ways" are listed in the Appendix.

what is already being done by others and how to avoid unnecessary overlap and redundancies. The process is not easy, however; and BPC planners will need to consider the best ways for gaining visibility into the multitude of BPC for combating WMD activities being conducted around the world (e.g., COCOM and service data sharing systems, DoD and interagency meetings). Once visibility is increased, procedures should be developed to maintain it.

One application of the ends, ways, and means construct is to use it to gain insight into how and where BPC for combating WMD ends are being pursued. From a strategic planning perspective, the ends, ways, and means construct allows the planner to better understand how to develop a regional approach. The construct allows the planner to identify where current activities are already pursuing the appropriate ends, where a new initiative might be duplicative, and where gaps remain. It also allows the planner to see where existing activities might be leveraged, supplemented, or complemented. For the most part, DTRA currently has no established partners with which to collaborate outside of the organization, with the exception of some ad hoc and programmatic arrangements. An example of an ad hoc arrangement is cooperation between the DTRA ICP program and the State Department EXBS program, in which nuclear, biological, and chemical expertise is occasionally pooled. The ICP program also has programmatic arrangements for collaboration, and it cooperates by statute with the Departments of Justice and Homeland Security. In some collaborative efforts,

DoD security cooperation desired end states may be "watered down" as the result of the goals of the collaborative partners. This situation is not necessarily bad, unless the objectives are wildly divergent.

Moreover, and very important to note, the process allows the planner to identify where the desired ends are *not* being pursued. In this case, a new initiative designed to pursue the desired end states could potentially address the shortfalls in activities. In addition, the construct allows the planner to see if the desired end state is even applicable in the region. It is possible that a particular desired end state is not being pursued because it is not appropriate or applicable in a particular region or country. For example, "WMD are secured" may not be an appropriate end state to pursue in a country or region where WMD programs do not exist.[15]

To depict this construct in a useful way, the study team prepared the matrix, shown in Table 4.12, which depicts BPC for combating WMD activities in a sample region. The matrix displays the desired end states down the far left column, and the ways across the top row. Plotted against these two variables are all of the programs that conduct activities in the region. To add further detail, the activities conducted in one selected country within the region are highlighted in red. To illustrate, we can see that in the region two programs—the Biological Threat Reduction Project (BTRP) and the Global Threat Reduction Programme (GTRP)—each contribute to the end "WMD are secured" by conducting training (way).[16] Further, we can see that for this same end, both of these programs also contribute by providing equipment and infrastructure and by conducting personnel exchanges. Moreover, BTRP conducts collaborative RDT&E activities with partners.

While the planner may find it useful to have insight into the various programs operating within a region, it is also possible to gain additional insight by examining programs operating within specific countries within the region. We have "grayed out" the end states "WMD are

[15] Some programs, such as the DOE International Radiological Threat Reduction Program, address materials that, while not part of a WMD program, could be used by nonstate actors as improvised weapons, such as "orphaned" radiological materials.

[16] The Appendix provides a description of the programs contained in Table 4.12.

Table 4.12
Illustrative Relationships Between Ends, Ways, and Means

	Crawl				Walk			Run		
Combating WMD Ends	**Needs and Capabilities Assessments**	**Training**	**Conferences/ Workshops/ Info. Exchanges**	**Defense and Military Contacts**	**Education**	**Exercises**	**Equipment/ Infrastructure**	**Personnel Exchanges**	**Experiments**	**RDT&E**
WMD are secured		BTRP GTRP					BTRP GTRP	BTRP GTRP		BTRP
WMD production dissuaded		IPP GTRP		DMC			IPP GTRP	IPP GTRP		
Proliferation is prevented	CSI	BTRP INECP CSI IBIT INTERDICT/ RADACAD ATA ICP PPI EXBS SLD GTRP	ICP OSCE "FRIENDS OF 1540"	DMC		PPI	BTRP ICP PPI CSI EXBS SLD GTRP	BTRP GTRP CSI	ICS	BTRP
Allies and partners are capable partners in combating WMD (in areas other than the those addressed by ends 1, 2, or 3)	CSI	GCMC ICP CMEP BTRP INECP CSI PPI IBIT INTERDICT/ RADACAD ATA EXBS SLD	GCMC DMC ICP SPP OSCE "FRIENDS OF 1540"	SPP DMC	GCMC	Regional cooperation PPI CMEP NATO EADRCC NATO JCBRN COE	ICP BTRP CSI EXBS SLD GTRP	BTRP CSI NATO school NATO JCBRN COE NATO CBRN BN GTRP	ICS	BTRP NATO JCBRN COE

NOTES: The table depicts activities conducted throughout a sample region, as well as providing details about one selected country in the region. The grayed-out cells indicate ends and ways that are not appropriate for the selected country. The activities that are conducted in the selected country are shown in red font.

secured" and "WMD production is dissuaded" because in this example in Table 4.12, the sample country has no WMD programs and there is no indication that it desires to acquire any. Neither BTRP nor GTRP is being conducted in the sample country; however, the ICP program is conducting training, exercises, and conferences/workshops in the sample country for both the desired end state of "proliferation is prevented" and "allies and partners are capable partners in combating WMD." Equipment and infrastructure for these same desired end states are also being provided.

Using the process described earlier in this chapter, we assessed the sample country to be in a "walk" relationship with the United States, so the "run" BPC ways columns are grayed out to indicate that they are the most appropriate. This process allows the planner to see that the United States is currently not conducting any exercises with the sample country (recall that the activities conducted in the selected country are in red), although there is an abundance of conferences, workshops, and training. By allowing the planner to see gaps and overlaps, such as these, the matrix outlines the beginning of an approach to BPC.

Table 4.12 also illustrates how various programs across several U.S. agencies have similar aims with obvious overlap, while at the same time potentially leaving some important areas unaddressed. Without greater visibility, however, opportunities to coordinate and collaborate with other programs are limited. Despite introducing multiple tools to track such activities throughout the world, DoD planners still do not have full visibility over DoD and other U.S. government capacity-building activities. Moreover, DoD planners have limited knowledge of what U.S. allies and international and regional organizations are doing. Likewise, the COCOMs and services have limited visibility beyond DoD activities in their Theater Security Cooperation Management Information Systems and service-level databases, respectively. As a result, planners are hindered in their ability to coordinate and deconflict events and activities. The effects, of course, are that resources may not be used in the most effective way and the partners may not be receiving the maximum benefit from U.S. efforts. At the time of this writing, OSD and the Joint Staff are working to develop a "BPC Portal," which will eventually knit together the various COCOM and

service-level databases to provide a common DoD picture. A more distant goal is to integrate interagency BPC activities and the activities conducted by U.S. allies.

During the course of our research, we observed that different regions and partner countries require different BPC for combating WMD approaches. For example, some countries are more accustomed to working bilaterally with the United States, while others prefer to work through existing multilateral mechanisms. Moreover, COCOM perspectives on the subject differ, which became apparent when COCOM officials were asked about what DoD needs to do to improve its capacity to work with partners in this area. While all agreed that DoD needs an active, predictive, posturing strategy, all highlighted different issues to consider. For example, EUCOM officials focused on where DoD should act, when it should act, what it should do, and what are the consequences of U.S. actions. PACOM officials pointed to the need for a clear focal point for combating WMD policy and to ensure a better understanding of the STRATCOM advocacy role in BPC. CENTCOM officials discussed the importance of gaining buy-in from the dominant states in the area of responsibility (AOR) to move new initiatives forward. And U.S. Southern Command (SOUTHCOM) officials highlighted the need for improved coordination with regional organizations and consistent strategic themes.[17]

Conclusion

This chapter has addressed the second key question of the monograph, "What should the United States do and how should it do it?" by describing steps two and three of the four-step process for developing regional approaches to build partner capacity for combating WMD. Through these steps, planners will gain insight into the role potential partners can fill by examining their capacity to combat WMD and their willingness to work with the United States. Moreover, under-

[17] Based on discussions with key COCOM combating WMD and theater security cooperation officials.

standing the nature of the U.S. relationship with a potential partner will suggest specific ways to build their capacity. Finally, by linking the ways and means with the desired end state, BPC planners can develop approaches by identifying gaps, overlaps, and opportunities to collaborate. Visibility into other, related programs is essential, as is coordination with other program managers.

CHAPTER FIVE

Developing an Assessment Framework

The fourth step in developing regional approaches to BPC for combating WMD focuses on assessing the effectiveness of BPC activities. DoD military departments, COCOMs, and support agencies are required by OSD to assess the effectiveness of their security cooperation programs and activities against OSD and COCOM objectives. But DoD planners currently do not have a robust assessment framework in place to address this requirement in a comprehensive manner (i.e., within and across the various programs it controls). Thus, DoD entities need a way to more fully understand how their activities support U.S. national security, OSD, and COCOM-level priorities and a way to determine which programs/activities and combinations of such are having the most significant impact, where, and why.

As discussed throughout this monograph, there are multiple levels of activities to access and varying degrees of "ownership" of resources and responsibilities for the decisionmaking processes. Moreover, assessment guidance is currently underdeveloped, while OSD is in the midst of reorienting its assessment requirements to map to the new GEF. DoD planners, therefore, may have an opportunity to influence the assessment process with DoD.

This chapter draws upon previous RAND research on developing measures of effectiveness and performance for service, COCOM, and OSD security cooperation programs, but it is specifically tailored to support DoD 's need to conduct assessments of its BPC for combating WMD programs in support of COCOM requirements and the OSD GEF (Marquis et al., 2006; Moroney et al., 2007).

How DoD Can Benefit from a Programmatic Assessment Framework

For several reasons, the study team's unit of analysis for assessment is the program level. First, assessment at the program level provides insight into overall program objectives, stakeholder/organizational objectives, and country objectives. Second, program-level assessment allows planners to take a more global view of the security cooperation mission. Third, assessing from a program level can provide insights into how well a given stakeholder is achieving its objectives in a given country. Finally, and possibly more compelling from an administrative perspective, OSD will assess the implementation of GEF from a programmatic perspective.

Programs are generally characterized by the following attributes:

- Mission, set of objectives, and associated resources
- Subordinate activities
- Manager(s) who conduct policy and/or resource oversight
- Reporting requirements to an oversight agency or office.

Many but not all programs are elements in the budget (e.g., service Program Objective Memorandums, etc.) and are sometimes equated with funding sources, initiatives, or activities. Programs are often overseen and implemented by multiple stakeholders—each of whom should contribute to the overall assessment.

Having an assessment framework that can compare across programs would help to better inform decisions about continuing, expanding, or cutting programs and resources devoted to security cooperation. Since DoD manages and executes programs across many ways (e.g., training, workshops, exercises, assessments, equipment, and RDT&E), the most useful type of framework would allow for an aggregated assessment across the various ways (i.e., at a level above the programs).

Such a framework would also enable a better understanding of barriers to the efficient delivery of security cooperation in support of OSD and COCOM objectives. The key would be making sure that there is an explicit linkage between end states (i.e., at the OSD,

COCOM, and support agency level), ways, and means. Additionally, a program-focused assessment framework would provide insight into the authorities, roles, and responsibilities of multiple security cooperation stakeholders when partnering arrangements are either mandated (as in the case of the ICP program) or ad hoc (as in the case of partnering with DOE, allies, and regional organizations).

A program-focused assessment framework would also help to inform DoD decisions about how support agencies, for example, with global mandates, balance requirements among countries and regions. Finally, a program-level framework would more easily allow DoD planners and program managers to comply with OSD GEF programmatic assessment requirements, but would also not preclude assessments across the various ways and at the country level. The seven-step framework below outlines the proposed process for assessing DoD's security cooperation programs against OSD and COCOM goals and objectives.

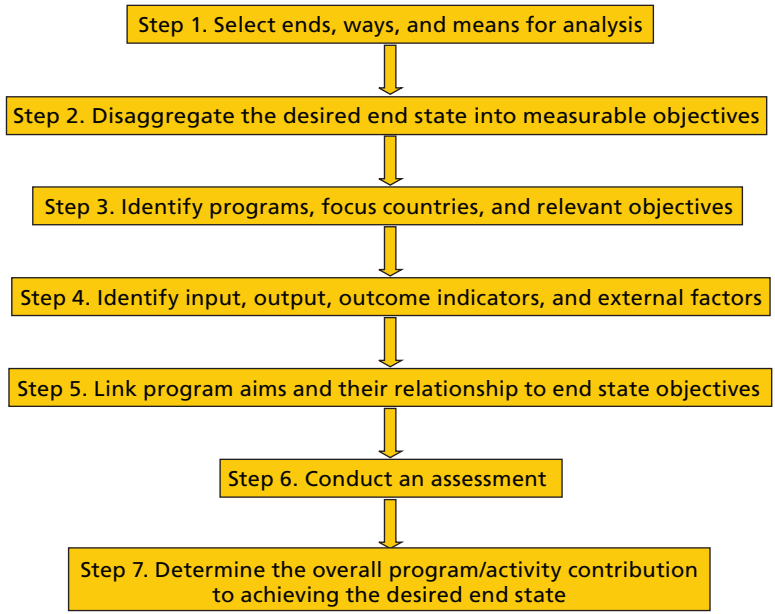
The Assessment Framework

The framework outlined in Figure 5.1 shows the entry point for the assessment process, which is selecting ends, ways, and means for analysis, followed by disaggregating the desired end states into measurable objectives. The assessment framework includes the selection of specific programs and countries for the analysis, followed by the development of inputs, outputs, outcomes, and external factors that contribute to, or mitigate against, the achievement of programmatic aims. The resulting assessment will provide insights into how well a specific program or activity contributes to the achievement of the selected desired end state. Each step listed below uses examples to illustrate key points.

Step One: Select Ends, Ways, and Means for the Analysis

The first step is to identify the ends, ways, and means of BPC for combating WMD to be assessed. There currently is no agreed-upon process

Figure 5.1
Seven-Step Assessment Framework



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within OSD or elsewhere to link ends, ways, and means to specific measures to assess the effectiveness and performance of its security cooperation activities. We can use the methodology outlined in Chapters Three and Four as the foundation for linking measures to ends, ways, and means. But the general idea is for DoD planners to select one or more of the four desired end states that are appropriate for allies and partners, such as desired end state 4: "Allies, partners, and U.S. civilian agencies are capable partners in combating WMD."

As to selecting the ways, the most logical examples would be the primary ways by which an agency conducts its BPC activities. The means would then be the specific programs, such as the DTRA ICP program (i.e., for the "way" of training) or the CTR PPI (i.e., for the "way" of exercises).

Step Two: Disaggregate the Desired End State into Measurable Objectives

Step two in the assessment framework requires that the relevant desired end states be disaggregated into specific, measurable objectives from a program perspective. For example, for the desired end state of "allies, partners, and U.S. civilian agencies are capable partners in combating WMD," one measurable objective could be improved border security at key ports of entry. Improvements in border security are thus easier to assess, relative to specific programs in a partner country. For the desired end state of "current or potential adversaries are dissuaded from producing WMD," a measurable objective could be that "a potential adversary renounces its efforts to develop a WMD program." Desired end states should be broken down into as many measurable objectives as possible to allow for a more robust programmatic assessment.

Step Three: Identify Programs, Focus Countries, and Relevant Objectives

Step three of the analysis requires the identification of specific programs to be assessed, focus countries, and relevant objectives. Those programs within DoD's direct purview (i.e., those for which DoD entities control the resources and set the policy objectives) should probably be selected for the initial assessment. These might include the ICP program or relevant parts of the CTR program, for example.

Determining focus countries to be analyzed within the confines of the specific program is also a key part of this step. It is important to be prudent when selecting the focus countries; access to partner country data and insights are critical components. And the assessment will not benefit from "random" commentary of country officials vis-à-vis the program; the partner officials who have *direct knowledge* of changes that have taken place in their country as a *direct result* of specific activities are the most valuable resources.

It is very important that programs are analyzed relevant to specific COCOM theater security cooperation objectives and, by extension, OSD GEF guidance. Programs can be categorized according to whether they are focused on indigenous, domestic capacity building or whether they are focused on building regional or collective (i.e., alli-

ance) capacity. Each classification of activities will have varying types of indicators, as discussed in step four of the assessment framework.

Key aims of each of the programs examined should also be identified in this step. For example, the ICP program might have, as a key aim, facilitating cooperation among the various security services, both military and civilian, in Azerbaijan that are responsible for combating WMD threats. There is likely to be more than one key aim for each program, and as such, all need to be captured.

Step Four: Identify Input, Output, Outcome Indicators, and External Factors

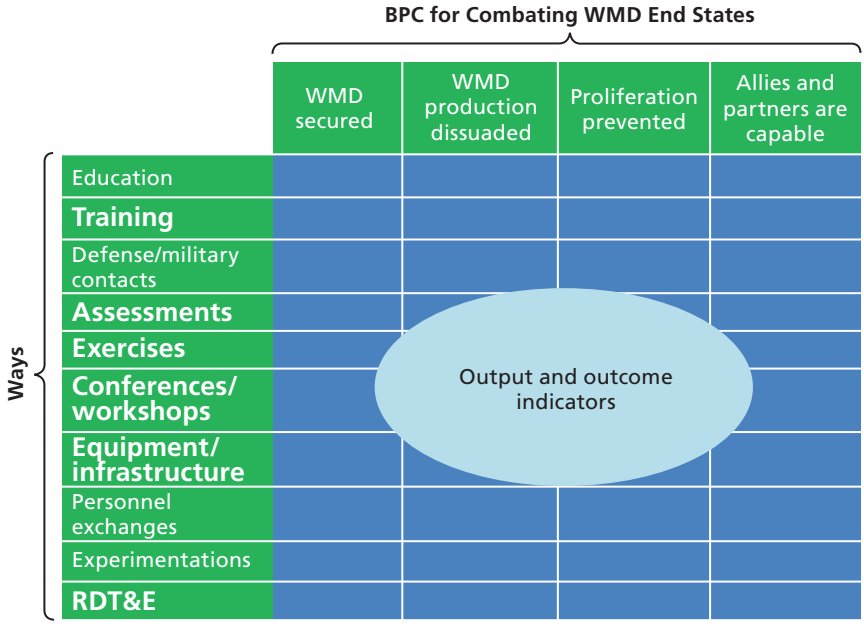
In step four, specific, yet generic *input*, *output,* and *outcome* indicators should be developed for the assessment. *Inputs* measure the program resources applied to a particular program or activity. Examples include U.S. manpower and money, which can, for example, affect the long-term sustainment of capabilities. *Outputs* measure the direct results of an event, activity, or program. At its most basic level, outputs help to create a baseline describing the level and type of engagement with a partner country. Over time, the outputs produce *outcomes*, which measure the longer-term results of programs and activities. Outcomes measure changes in program participants' behavior, knowledge, skills, status, and/or level of functioning.

These metrics or specific indicators should be developed based on the alignment of ways and desired end states, as shown in Figure 5.2.

Figure 5.2 shows the primary BPC for combating WMD desired end states, which were identified in Chapter Three, together with the BPC or security cooperation ways. The primary ways DTRA works with partner countries are highlighted in bold, larger text for illustrative purposes, although DoD programs cut across all ways.

Each box of the matrix in Figure 5.2 should contain specific output and outcome indicators. For example, relative to the desired end state of "allies and partners are capable partners in combating WMD," and the way of "exercises," the output and outcome indicators in Figure 5.3 could apply.

Figure 5.2
Linking Desired End States to Security Cooperation Ways



NOTE: The primary ways DTRA works with partner countries are highlighted in bold, larger text for illustrative purposes, although DoD programs cut across all ways.

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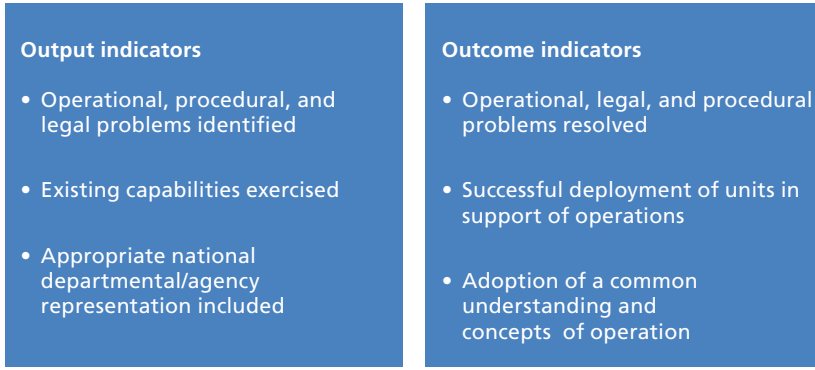
Once the indicators are identified, it is important to select those that best apply to the programs being examined. For example, if a program focuses on the way of exercises and, specifically, improving the border security capacity of a specific country, the appropriate output indicators may include the number of countries involved, whether existing capabilities were exercised, any problems identified, and whether the relevant agencies were represented at the exercise. For example, did the partner country send a representative from the ministry of foreign affairs to an exercise focused on the technical or scientific aspects of combating WMD threats? If this occurs, the U.S. officials involved might question whether that particular country is interested in receiving assistance

Figure 5.3
Sample Output and Outcome Indicators for Exercises



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from the United States in that format, or perhaps whether the United States failed to communicate to the partner the types of participants required for the event. In any case, something definitely appears to be wrong, with either the design of the event, the topic relative to the partner's interests, the U.S. ability to communicate which partner agency should send representatives, or the partner's willingness to engage.

Appropriate outcome indicators as shown in Figure 5.3 would be whether common standards or concepts of operations were adopted, or whether any operational or other problems were later resolved. It is important to note that outcome indicators must be tracked over time, because by design they focus on the longer term. Moreover, DTRA program managers, executing an activity in support of a geographic COCOM requirement, are not necessarily responsible for tracking those outcome results over the longer term. This responsibility often lies primarily with the COCOM and the component commands, particularly if the COCOMs are responsible for developing the policy outcomes for the event.

From a resourcing perspective, the majority of DoD and U.S. government security cooperation resources do not plan for or set aside resources to sustain particular capabilities beyond a given year. This situation creates additional challenges to the BPC process, and it also impacts the ability to attribute the outcomes to any given program.

Often, it is someone else's program that ends up focusing on sustaining a capability started by DTRA. This is not a slight to DTRA; the problem primarily stems from DoD's inability to program for sustainment of BPC activities across the five-year defense plan.

It is possible, however, to leverage inputs from related activities—service, DoD, interagency, regional organizations, allied or bilateral—to help improve sustainment potential. As discussed in the previous chapters, because there are many U.S. and allied security cooperation programs taking place around the world, it is very difficult to link an outcome to a specific activity. Sustainment of activities can also be enhanced through U.S., donor, or indigenous resources. Those efforts—and how they factor into the achievement of specific outcomes—should also be taken into account whenever possible.

External factors that can influence the success of the program/activity to achieve the desired end state should also be identified in this step. These include, for example, process factors, other security ways that contribute to the desired end state, and country-specific factors (e.g., political, legal, economic). Some external factors are also outside the purview of the U.S. government, such as economic or political factors of a given partner that may curtail the effectiveness of U.S. security cooperation programs. For example, DTRA ICP and CTR PPI programs conduct training in Azerbaijan with the maritime border guards and land border security forces. The maritime component, however, is complicated by external political and legal factors. The Caspian Sea is not clearly delimitated in terms of which littoral countries own which part of the coastline. Also, Azerbaijan has much less influence in the region as compared with Russia and Iran. Thus, the government of Azerbaijan finds itself caught between two powerful neighbors in the Caspian region. So, in essence, the programs can provide training to the maritime border guards in Azerbaijan many times over to interdict ships suspected of transiting WMD, but in reality, the Azeris are highly unlikely for political and legal reasons to actually board an Iranian or a Russian ship, even if that ship enters Azeri waters.[1] This is an example of everything being done right in theory—a relevant partner

[1] Based on discussions with Azeri officials, Baku, Azerbaijan, July 2006.

that is willing to work with the United States, that has a lower capacity, that has a fairly solid relationship with the United States, and that has success relative to the output and outcome indicators—but in practice the desired end states cannot be achieved because of external factors. It is important for planners to be aware of external factors so that, if and when possible, such factors can be mitigated against.

Planners and program managers should attempt to understand the results or effects achieved by executed events. This entails close coordination with the COCOM J-5 (TSC policy and strategy), J-9 (assessments), J-7 (training), and possibly, J-3 (exercises).

Step Five: Link Program Aims and Their Relationship to End State Objectives

In step five of the assessment framework, program aims are linked to the overall combating WMD desired end states. For example, the aim of the ICP program is to assist partners in "counter[ing] the threat of the proliferation of weapons of mass destruction–related materials and technologies across the borders and through the independent states of the former Soviet Union, the Baltic region, [and] Eastern Europe" (DTRA, not dated [c]). This aim ties directly to desired end state 3: "Proliferation of WMD and related materials to current and/or potential adversaries is dissuaded, prevented, defeated, or reversed."

Step Six: Conduct an Assessment

In step six, all the requisite components of the assessment have been identified. Those conducting the assessment should look for evidence that shows whether the program is producing the desired outputs and outcomes or effects in the selected countries. Data collection is almost always the most difficult part of the assessment process. Inevitably, there will be discrepancies to reconcile. Therefore, the data collection effort should include a variety of sources so that data can be cross-checked to get the most accurate and balanced picture of the effectiveness of individual activities in specific countries. Data collection efforts could draw on the following sources: activity and/or event after-action reports, COCOM Theater Security Cooperation Management Information Systems, programs of instruction, and focused discussions with

key U.S. policy planners and program managers, program and activity executors, and partner country officials. Questions should be developed for these officials that are based on the output and outcome indicators selected in step four of the assessment framework.

As discussed previously, obtaining the partner country's perspective to essentially verify that specific outcomes can be tied to specific activities is a critical piece of information that can either corroborate or raise questions about the data provided by the U.S. participants. This step is important in the assessment process and should not be overlooked. However, obtaining the right level and type of partner country feedback is one of the most time-consuming and difficult tasks.

Step Seven: Determine the Overall Program and/or Activity Contribution to the Desired End State

Step seven determines how well a program or activity contributes to the desired end state. To make this determination, the unit of analysis now becomes focused on the partner country, rather than the specific programs. Therefore, a good deal of visibility about all existing efforts in that particular country must be known. That is even more difficult than it sounds since there is no U.S. central repository for all combating WMD programs and activities in any given country, let alone knowledge of what U.S. allies are doing in their security cooperation efforts around the world.

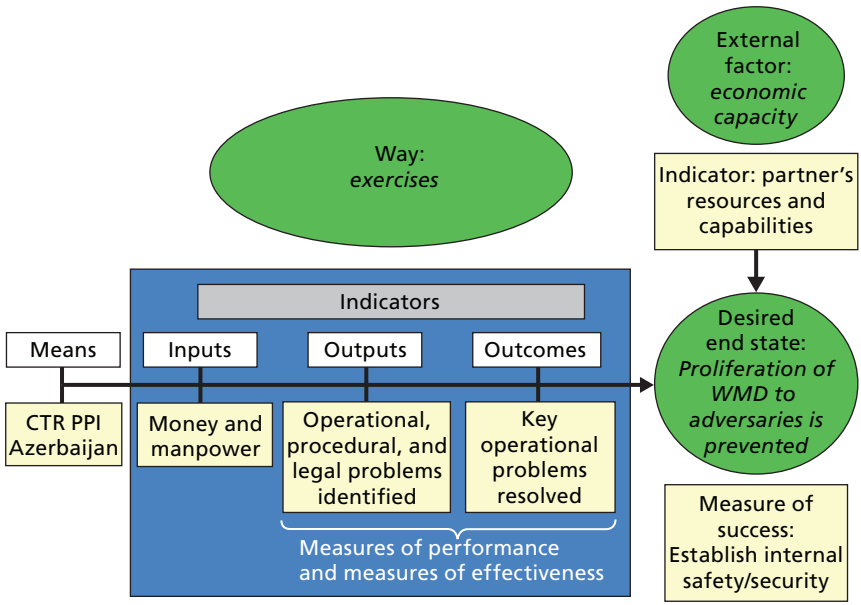
Nevertheless, it is important to try to determine whether different ways are achieving the desired effects in the respective partner countries. Program managers in particular should be concerned with assessing the extent to which the various ways are furthering the strategic desired end states. DoD pursues its activities in many different ways and has the authority to reallocate its programmatic resources as determined to be most appropriate. With this type of assessment process in place, decisions on whether to continue, cut, or expand an existing program, and which type of program more generally, can be made with greater certainty.

Using the Assessment Framework—The Azerbaijan Example

Figure 5.4 provides a depiction of the assessment framework to summarize the previous discussion. It shows an assessment of the CTR PPI program in Azerbaijan, a maritime-focused exercise, as mentioned above. The desired end state, means, and relevant output and outcome indicators are identified, as are the external factors outside of U.S. control that may inhibit or enable the desired effects. In this example, legal capacity is identified as a potential impeding external factor because the lack of legal agreements between Azerbaijan and the other littoral Caspian countries inhibits Azerbaijan's ability to interdict suspected WMD trafficking carried by adversaries.

By tying the outcomes to the overall desired end state, a link can be made back to the inputs to enable informed discussions and decisions regarding whether to continue, cut, or alter an existing program in a given partner country.

Figure 5.4
Assessment Framework: The Comprehensive View



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There are several courses of action that the assessment could generate. First, the assessment may determine that the desired end states are simply not being achieved and that little to no progress is being made. A decision could be made to cut the program, at least in the country or region in question, as a result. At a minimum, specific changes within a program should be made. Second, a program may be left alone to proceed unchanged if it is meeting its objectives and making progress toward the overall desired end states. Third, if a program makes significant progress or proves to be an unexpected success, it may be expanded in the current region and/or country, or the model could be applied to another region with similar characteristics.

Fourth, when the results are less than optimal, program managers will have a more systematic way to identify what the problems were and how to address the issue in a follow-up event. Perhaps the problem was the overall BPC for the combating WMD approach or the way in which the activity was executed. In that case, a necessary next step would be to consider an alternative approach that better addresses U.S. requirements and a partner's hierarchy of security needs and interests. Fifth, the reason for the program may no longer exist, e.g., if the threat has dissipated or if the program has simply achieved the desired end states to a sufficient extent.

In practice, however, there are challenges to assessment, resourcing BPC, and implementation that should be highlighted. For example, there is no single funding advocate within DoD for BPC to combat WMD activities. From an implementation perspective, planners do not have a single office with the authority to oversee the effective implementation of all programs. At present, there is no real way to know if planned combating BPC activities fill existing gaps, or if these activities reflect the most optimal use of DoD resources.

If implemented, the seven-step framework outlined here should assist DoD planners and program managers in assessing the extent to which their individual programs and activities contribute to BPC for combating WMD desired end states and effects.

Conclusion

This chapter has discussed the fourth step in developing regional approaches to build partner capacity to combat WMD threats: developing a framework to assess, at the program level, BPC for combating WMD activities. Taken together with the previous three steps discussed in Chapters Three and Four, we provide the BPC planner with a process for assessing potential BPC partners given specific threats; a rationale for determining specific desired end states and ways and means for achieving them; and a framework for assessing the effectiveness of the activities.

CHAPTER SIX

Conclusions and Way Ahead

An approach to BPC for combating WMD is defined at the strategic level as a mix of types of activities that collectively address combating WMD ends in a region. Successful partner capacity building uses the right mix of activities, sequenced in the most appropriate way as to allow for the sustainability of the capacity provided. To ensure the approach will have the desired effects, DoD should pursue a number of reinforcing activities. First, it is critical for U.S. policymakers and program managers to develop and implement an effective and coordinated strategic communications plan that will reinforce key concepts. An effective communications strategy should include listening to the partner country's views.[1] Second, DoD planners and program managers should create and take advantage of opportunities to collaborate at the planning level. And third, it is important to make clear linkages between strategic desired end states and functional plans.

This monograph has outlined and then applied a process for developing regional approaches to build partner capacity for combating WMD. We have focused on the following four steps:

- Identifying capabilities and desired end states relative to the WMD threat
- Working with potential partners
- Identifying relevant BPC ways and means

[1] For example, DTRA and the Marshall Center conducted a workshop in November 2007 for Black Sea littoral partners in an effort to better understand the perspectives and needs of the partners for combating WMD proliferation.

- Developing a framework to assess the effectiveness of BPC activities.

Recommendations for implementing this approach can be linked to seven key themes that will serve to guide DoD BPC for combating WMD efforts. These themes include improving guidance, increasing visibility of ongoing activities at a global level, improving coordination, encouraging collaboration and implementation, conducting assessments, and securing resources. Recommendations for implementing each of the four steps are provided below and linked to the seven key themes.

Identifying Desired End States and Capabilities Relative to Threats

Identifying desired end states and capabilities relies on having good *guidance* and an understanding of the nature of the WMD threat in each of the COCOM subregions. These insights will help planners focus security cooperation resources on the right capabilities for the right reasons in the most effective ways, according to OSD and COCOM guidance. After the combating WMD desired end states relative to the WMD threats are determined, it is important to identify the required key capabilities.

Specific Recommendations

1. Planners and program managers should ensure that combating WMD programs address OSD guidance and COCOM requirements. All activities should support at least one of the major desired end states identified in OSD or COCOM guidance, and the linkages to that guidance should be clearly articulated.
2. Regular planning sessions among the various DoD functional and regional planners and program managers would help to ensure adherence to the guidance and also ensure that COCOM requirements are met in the most effective and efficient ways.

This can be accomplished through regular planning sessions with program managers to ensure that activities are deconflicted and gaps identified.

3. Planners should develop memorandums of understanding or internal operating instructions that formalize roles and relationships, for example, between DTRA, STRATCOM, and the SCC.
4. It might be worthwhile to hold, perhaps on a monthly basis, country-specific or functionally focused (e.g., border security) working groups, in which all program managers conducting activities with that country share ideas on (a) current capabilities under development, (b) desired end states being pursued, and (c) any lessons from recent activities about which others should be aware. Such a forum could produce country-specific or functionally focused plans that clearly link to GEF and COCOM desired end states. OSD could organize such meetings, or they could be held by the support agencies.

Working with Potential Partners

Working with partners relies on an understanding of the partner's capacity and willingness, and also on an understanding of the nature of the U.S. relationship. The effectiveness of U.S. BPC activities is in large part reliant on the synergy between various programs that are undertaken, often independently of each other, with a given country or within a region. Close *coordination* between DoD and broader U.S. government activities will enable program managers to more effectively reinforce key concepts of combating WMD with U.S. partners, in a reinforcing way that builds the capacity of partners to combat WMD threats.

Specific Recommendations

1. DoD should focus on the partners that are most relevant to a specific WMD threat, as discussed in Chapter Three. Appropriate partner roles can be determined by identifying the willingness of a potential partner to work with the United States and its current capacity to combat WMD threats. Planners should apply and, if necessary, consider the capacity and willingness criteria developed in Chapter Four and expand on them as needed, based on insights from the Intelligence Community and regional experts. The key is to determine a country's overall capacity and willingness to combat WMD threats, and then be creative to develop the best approach to working with that specific country to meet U.S. and partner needs. The best approach may be, in some cases, to work through a third party in a BPC context.
2. Greater emphasis should be placed on coordinating with other U.S. government agencies when partners are more willing to work directly with the United States. DoD participation in international working groups, including donor conferences and clearinghouses such as the South Caucasus and Africa Clearinghouses (in which both the UK and France take part), is important especially when it comes to countries that do not wish to work directly with the United States on combating WMD issues. External coordination could uncover new opportunities to collaborate with other agencies, particularly the State Department (i.e., the EXBS program) and DOE (i.e., the SLD program), to leverage other activities and avoid duplication of effort. Other examples include spin-off events from PSI and GICNT, as well as BPC for combating WMD activities sponsored by such organizations as the IAEA, the Organization for the Prohibition of Chemical Weapons, NATO, SHAPE, the European Union, the Organization for Security and Cooperation in Europe, the Asia Regional Forum, and the Organization of American States.
3. DoD planners should seek to attend interagency working groups, such as the "deconfliction meetings" held by the State Depart-

ment's Europe and Eurasia Coordinator's Office, and other fora for discussing security cooperation activities that have a combating WMD objective. Another venue for such coordination is the semi-annual SOCOM Global Synchronization Conference, which is augmented by frequent "community of interest" video teleconference discussions that include DoD and other interagency stakeholders.[2] Planners might encourage STRATCOM and/or SCC to hold similar conferences, or at least video teleconferences, specifically on combating WMD.

4. UNSCR 1540 country reports, available on the United Nations Web site (United Nations Security Council, 2007), provide valuable insights into potential partner needs *from the partner country's perspective.* A better understanding of a partner's self-identified capability needs relative to the threat will help to ensure that DoD programs are focused on the right issues.

Identifying Ways and Means to Build Partner Capacity to Combat WMD

The various ways of building partner capacity can be organized along a spectrum to create a building block approach. Where the United States engages a partner along this spectrum is directly related to the nature of the U.S. relationship with a partner country. Wider *visibility* into the specific ways and means pursued by other DoD entities, U.S. agencies, allies, and international and regional organizations will help program managers determine what might be the most appropriate approach at a given time. During the COCOM workshops held for this study, one recurring observation was the need for various programs and activities to work together and complement each other; such an effort would not be possible without a better understanding of what those programs and activities are and which agencies manage and execute them.

[2] Based on discussions with SOCOM officials, Tampa, Florida, January 2008.

Specific Recommendations

1. Program managers and planners should consider the current state of the U.S. relationship with a given country—i.e., crawl, walk, or run—to identify how DoD programs can be used most appropriately.
2. Program managers and planners should continue to monitor COCOM, service-level (especially the Army's ARGOS and the Air Force's Knowledgebase systems), and other agencies' databases that track and assess security cooperation activities. The OSD–Joint Staff initiative to develop a BPC portal information sharing network may be the best opportunity to share data on programs and activities, and to gain visibility on activities conducted by other agencies within DoD and eventually among interagency groups.
3. Planners should expand their participation in COCOM theater security cooperation working groups by briefing their specific combating WMD programs whenever possible. Increased permanent representation at the geographic COCOMs from a variety of DoD entities would also help to ensure that BPC capabilities are fully realized and utilized at the COCOM level.
4. Program managers and planners should seek to gain visibility into service- and National Guard–level activities on BPC for combating WMD. One example is the Army CMEP tabletop exercises and council meetings in the Balkans. Other Army-specific Title 10 programs—such as staff talks, scientific exchanges, and the like—can also have a BPC for combating WMD element. In addition, the Army and Air National Guard SPP may be an ideal partner for DTRA. In FY 2008, SPP was allocated $10 million (an increase of about $8 million annually) to support program activities, which generally include workshops and information exchanges. SPP certainly is well within its authority to focus some events on combating WMD.
5. Program managers and planners should seek to take advantage of *collaboration* opportunities. These include supporting another agency's activities, perhaps as a voluntary observer at first. When

> DoD program managers identify a collaborative opportunity, they should ensure that OSD and COCOM combating WMD desired end states are included, especially since collaboration typically involves the sharing of event resources, and therefore objectives.

In this regard, it would be helpful to place greater emphasis on collaborating with other U.S. government agencies and international working groups, such as donor conferences and clearinghouses. DoD should consider supporting other U.S. government agency events, such as the DHS CSI, State Department EXBS program, and DOE SLD program workshops and various training sessions for which DoD expertise can be most effectively utilized.

It would also be beneficial for a varity of DoD planners and program managers to support COCOM bilateral and multilateral exercises on BPC for combating WMD—such as FLEXIBLE RESPONSE (EUCOM), PANAMAX (SOUTHCOM), REGIONAL COOPERATION (CENTCOM), TEMPEST EXPRESS (PACOM), and GOLDEN SPEAR (AFRICOM)—and to support NATO exercises in the EUCOM area of responsibility, such as those conducted by the Euro-Atlantic Disaster Response Coordination Center. Finally, it is important to involve civilian and military organizations from both the United States and the partner.

Developing an Assessment Framework

As discussed in Chapter Five, DoD currently does not have a robust assessment framework in place to address this requirement in a comprehensive manner. Planners need a way to more fully understand how their programs support U.S. national security, OSD, and COCOM-level priorities, and a way to determine which programs and activities are having the most significant impact. Two key themes to consider when developing an assessment framework are *resources* and *implementation processes*—i.e., the ends, ways, and means of building partner capacity. The actual *assessment* of these resources and processes is, in

itself, a key element to consider in successfully executing BPC programs and activities.

Specific Recommendations

1. Program managers should implement the seven-step framework outlined in Chapter Five as a way to assess the effectiveness of DoD programs. The assessments should be conducted in coordination with the geographic COCOMs, and we recommend that the analysis be conducted at the program level, using specific countries as test cases. Having a better understanding of how DoD programs and specific activities are supporting COCOM and OSD objectives will enable resource managers to make informed decisions about whether to expand, continue as is, alter in some way, or cut an existing activity that is falling short of its objectives. As Chapter Five points out, DoD manages and executes programs across all of the "ways"; this type of framework would allow for individual programs to be aggregated into an assessment across these various ways.
2. Both performance and effectiveness measures should be developed that link the relevant combating WMD ends, ways, and means. Activity after-action reports that reflect or address those metrics should be shared with the geographic COCOM J5 Combating WMD and Theater Security Cooperation offices. In addition, it would be useful for planners to better understand the effects of other agencies' security cooperation activities that are pursuing the same ends, especially those that involve support from DoD programs. Finally, program managers should seek feedback from partner countries through both free-flowing discussions and focused surveys based on agreed-upon metrics.
3. In terms of *resources*, DoD might consider creating a single resource advocate for combating WMD BPC programs. The advocacy for various programs should occur as a result of a detailed assessment described in this monograph. Program managers can assist the advocate by providing visibility on various programs; such collaboration can serve as a resource multiplier.

4. In terms of *implementation*, we recommend that planners and program managers consider a pilot assessment consisting of one or two key DoD programs that focus on several different "ways" of security cooperation (i.e., perhaps one training program and another that focuses on exercises, equipment transfer, or workshops). The seven-step assessment process outlined in Chapter Five provides a road map for planners to carry out the assessment at the program level. The lessons of such an assessment could be applied to future assessment efforts, and the output and outcome indicators can also be adjusted as a result.
5. Program managers should consider whether the planned activities address gaps identified through the four-step process. This would require a higher level of visibility into the ongoing activities than is currently available in a single source. Overall, DoD should emphasize the coordinated use of complementary projects when possible, assist in the creation of common regional practices, support others' programs when deemed appropriate, and understand when to stand aside.

Conclusion

The ideas presented in this chapter, and in the monograph as a whole, are an essential first step for DoD to enhance the effectiveness of its efforts to build partner capacity to combat WMD. The recommendations discussed above form a potentially useful construct for outlining the key issues and questions, and implementation options. DoD's organizational issues will play an important role in whether these options are feasible in the short term. Over the long term, these issues should not stand in the way of efforts to improve BPC to combat WMD through strong linkages to U.S. and partner security interests and enhanced visibility, coordination, collaboration, and assessments that lead to better program implementation and resource allocation.

APPENDIX

Building Partner Capacity for Combating WMD Programs and Activities Database

This appendix provides a database of BPC for combating WMD programs and activities. The study team examined 45 of these, compiling a comprehensive, but by no means exhaustive, collection of programs and activities. To better understand the types of BPC for combating WMD efforts being conducted globally, the study team conducted focused discussions with representatives from DoD and other U.S. government agencies, as well as select partners, allies, and regional organizations. Within DoD, the team contacted personnel in OSD and at EUCOM, SOUTHCOM, PACOM, SOCOM, STRATCOM, the Defense Intelligence Agency, and DTRA. The team also gathered information on programs conducted by the Departments of State, Homeland Security, and Energy. Over the course of approximately one year in 2007, the study team conducted focused discussions with the following key departments and groups:

- Army Staff G-3/5
- Asia Pacific Center for Security Studies, Waikiki, Hawaii, April 2007
- Carnegie Institute, Moscow, Russia, June 2007
- CENTCOM J-5, J-3, Tampa, Florida, January 2008
- Center of Excellence for Disaster and Humanitarian Assistance, Honolulu, Hawaii, April 2007
- Croatian Government, Zagreb, Croatia, June 2007
- Defense Threat Reduction Agency TSC, ICP, and CW

- Department of Energy Second Line of Defense, Washington D.C., December 2007
- U.S. Department of State Combating WMD Terrorism, Washington D.C., December 2007
- EUCOM J-5, J-2, J-7, Stuttgart, Germany, June 2007
- George C. Marshall Center for Security Studies, Garmisch-Partenkrichen, Germany, June 2007
- Joint Staff J-5, Washington, D.C., December 2007
- NATO School, Oberammergau, Germany, June 2007
- NATO WMD Center, Brussels, Belgium, June 2007
- National Guard Bureau, International Affairs, Washington, D.C., August, 2007
- Nuclear Threat Initiative, Washington, D.C., March 2007
- OSCE, Vienna, Austria, May 2007
- OSD Global Affairs, Washington, D.C., June 2007
- PACOM J-5, J-2, Honolulu, Hawaii, April 2007
- PIR Center, Moscow, Russia, June 2007
- SHAPE, Brussels, Belgium, June 2007
- SOCOM J-5, J-3, Tampa, Florida, January 2008
- SOUTHCOM J-2, J-3, J-4, J-5, Miami, Florida, January 2008
- STRATCOM J-5, J-8, Combating WMD Center, Omaha, Nebraska, November 2007
- U.S. Embassy Moscow, Moscow, Russia, June 2007
- UK Ministry of Defence and Foreign and Commonwealth Office, London, UK, June 2007
- UN Security Council 1540 Committee, Washington, D.C., May 2007.

In addition to a data review to identify relevant regional organizations and their BPC programs and activities, the team met with three such organizations in the EUCOM area of responsibility. In Vienna, the team consulted with the Organization for Security Cooperation in Europe and attended meetings with officials from the Forum on Security Cooperation, the Border Security office, and External Affairs.

At NATO, the team met with the officials from the International Staff and the International Military Staff focused on WMD and con-

sequence management outreach activities. The team also met with representatives from the government of the United Kingdom (Ministry of Defence and the Foreign and Commonwealth Office) because of the UK's role as a long-standing U.S. ally, and the government of Croatia because of its relatively new role as a U.S. partner, as well as its active regional role in combating WMD.

This limited sampling of regional organizations, allies, and partners is tied to the available time and budget for completing the study, but represents a necessary step that planners should take to fully understand the range of BPC efforts in a given region. This effort should be greatly expanded in practice.

The database depicts the relationship between these means and the ends and ways of BPC to combat WMD as described in Chapter Four. It is organized by the controlling agency, country, or organization, and includes a brief description, the desired end states to which it contributes, and the ways that it employs. Within the tables, the ends and ways are referred to by their letter or number as described below.

BPC for Combating WMD Ends

1. Existing worldwide WMD are secure.
2. Current or potential adversaries are dissuaded from producing WMD.
3. Proliferation of WMD and related materials to current and/or potential adversaries is dissuaded, prevented, defeated, or reversed.
4. Allies, partners, and U.S. civilian agencies are capable partners in combating WMD.

BPC for Combating WMD Ways

A. Need and capabilities assessments
B. Training
C. Conferences/workshops/information exchanges
D. Defense/military contacts

E. Education
F. Exercises
G. Equipment/infrastructure
H. Personnel exchanges
I. Experiments
J. RDT&E.

The entries in Tables A.1–A.4 are grouped first by COCOM and then by the agency responsible for the specific activities, i.e., U.S. government department, regional organization, or partner or ally.

Table A.1
Programs and Activities Within the CENTCOM AOR

Department of Defense			
Program/Activity	**Description**	**Ends**	**Ways**
EAGLE RESOLVE	CENTCOM consequence management exercise conducted in Southwest Asia. Includes WMD interdiction elements.	2, 3, 4	F
GOLDEN SPEAR	CENTCOM consequence management exercise conducted in the Horn of Africa.	2, 3, 4	F
REGIONAL COOPERATION	CENTCOM consequence management exercise conducted in Central and South Asia.	2, 3, 4	F
SPP	National Guard program pairing states with National Guard counterparts. A number of consequence management exercises and workshops have been conducted.	4	D, F, C
Department of Energy			
Program/Activity	**Description**	**Ends**	**Ways**
IPP	DOE program to engage FSU scientists. The aim is to prevent proliferation of nuclear expertise.	1, 3	H
SLD	DOE initiative to provide radiation detection equipment and training at border crossings.	3	B, A, G
INECP	DOE program to strengthen nonproliferation export control practices. Provides assistance through training and workshops.	3	B, C

Table A.1—Continued

Department of Energy			
Program/Activity	**Description**	**Ends**	**Ways**
Megaports	DOE initiative to provide radiation detection equipment and training at ports to detect WMD materials that could potentially be shipped to the United States. This program is complementary to DHS CSI.	3	B, A, G
INTERDICT/ RADACAD	DOE effort conducted by Pacific Northwest National Lab. Provides training and exercises to assist states in WMD detection. It supports the ICP, SLD, and EXBS programs, which are supported by DOE, DHS, DoD, and DOS.	3	B, F
Department of State			
Program/Activity	**Description**	**Ends**	**Ways**
ATA	In addition to its primary focus on counterterrorism, this DOS program provides several WMD courses, including WMD awareness, operations, and consequence management, to interested states.	3, 4	B
EXBS	DOS effort to provide training and equipment and to conduct WMD interdiction exercises. DOS partners with DHS, DOE, DOC, and DoD to implement the program.	3, 4	B, A, F, G
Department of Homeland Security			
Program/Activity	**Description**	**Ends**	**Ways**
IBIT	DHS (Customs and Border Protection) program that provides training exercises for preventing proliferation of WMD. The training is being accomplished primarily in conjunction with the EXBS program.	3	B, F
CSI	DHS program aimed at providing radiation detection equipment and training at selected ports. It is aimed at detecting WMD materials that might be shipped to the United States.	3	B, A, G
ICS	DHS program to install and test new or experimental radiation detection equipment/ procedures at select CSI ports.	3	I, J

Table A.2
Programs and Activities Within the EUCOM AOR

Department of Defense			
Program/Activity	**Description**	**Ends**	**Ways**
CTR BTRP	DoD effort, funded by Nunn-Lugar, aims at providing assistance to FSU states to prevent the proliferation of biological weapons materials. Another objective is to prevent the proliferation of biological weapons expertise to nonstate or rogue state programs.	1, 3	E, B, A, C, H
CTR CWD	Chemical Weapons Destruction. DoD program funded by Nunn-Lugar to assist Russia in eliminating materials under the Chemical Weapons Convention.	1, 3	A, G
CTR PPI	DoD program funded by Nunn-Lugar to address WMD interdiction at borders. It provides equipment and training. DoD coordinates with DOS, DOE, DHS, and DOC.	3	B, G
CTR DMC	DoD program funded by Nunn-Lugar to establish relationships with FSU officials. One objective is to engage in discussion on furthering proliferation prevention efforts.	3, 4	D, C
ICP	DoD effort to provide training and equipment and to conduct WMD interdiction exercises. DoD partners with DOJ (FBI) and DHS to implement the program.	3, 4	B, F, G
GCMC	DoD regional training and education center conducts WMD policy course for international officers.	4	D, E
FLEXIBLE RESPONSE	EUCOM exercise focused on the Europe AOR; it includes WMD interdiction and consequence management elements.	2, 3, 4	F
SPP	This National Guard program pairs states with National Guard counterparts. A number of consequence management exercises and workshops have been conducted.	4	D, F, C
CMEP	U.S. Army program to provide consequence management assistance though training and exercises.	4	F, C

Table A.2—Continued

Department of Energy			
Program/Activity	**Description**	**Ends**	**Ways**
MPC&A	DOE program funded by Nunn-Lugar to secure nuclear materials in FSU.	1	B, A, G
IPP	DOE program aims to engage FSU scientists and prevent proliferation of nuclear expertise.	1, 3	H
NCI	Nuclear Cities Initiative. DOE program to assist Russia with eliminating WMD complexes and transition workers to other fields. The aim is to prevent proliferation of expertise.	1, 3	H
SLD	DOE initiative to provide radiation detection equipment and training at border crossings.	3	B, A, G
Megaports	DOE initiative to provide radiation detection equipment and training at ports to detect WMD materials that could potentially be shipped to the United States. This program is complementary to DHS CSI.	3	B, A, G
INECP	DOE program to strengthen nonproliferation export control practices. It provides assistance through training and workshops.	3	B, C
IEMC	International Emergency Management and Cooperation. DOE program assists states with radiological and nuclear consequence management and conducts exercises, training, and workshops.	4	B, F, C
INTERDICT/ RADACAD	DOE effort, conducted by Pacific Northwest National Lab. It provides training and exercises to assist states in WMD detection. It supports the ICP, SLD, and EXBS programs, which are supported by DOE, DHS, DoD, and DOS.	3	B, F
Department of State			
Program/Activity	**Description**	**Ends**	**Ways**
ATA	In addition to its primary focus on counter-terrorism, this DOS program provides several WMD courses, including WMD awareness, operations, and consequence management to interested states.	3, 4	B
EXBS	DOS effort to provide training and equip-ment and to conduct WMD interdiction exercises. DOS partners with DHS, DOE, DOC, and DoD to implement the program.	3, 4	B, A, F, G

Table A.2—Continued

Department of Homeland Security			
Program/Activity	**Description**	**Ends**	**Ways**
IBIT	DHS (Customs and Border Protection) program that provides training exercises for preventing proliferation of WMD. The training is being accomplished primarily in conjunction with the EXBS program.	3	B, F
CSI	DHS program providing radiation detection equipment and training at selected ports. It is aimed at detecting WMD materials that might be shipped to the United States.	3	B, A, G
ICS	DHS program to install and test new or experimental radiation detection equipment/procedures at select CSI ports.	3	I, J
Regional Organizations			
Program/Activity	**Description**	**Ends**	**Ways**
NATO EADRCC	This program conducts consequence management exercises with member states.	4	F, C
NATO School	The NATO School provides technical and policy-level WMD-related training to NATO and non-NATO states.	4	B
NATO CBRN BN	NATO CBRN Defense Battalion, a multinational military unit designed to leverage member states' WMD detection and consequence management capabilities. States provide forces and receive standardized training.	4	B, F, H
OSCE "Friends of 1540"	This is a U.S. delegation initiative to gain support for UNSCR 1540 among the OSCE members. Workshops and information sessions are the primary tools.	3	C
BSEC Working Group on Cooperation in Emergency Assistance	The group conducts exercises, workshops, and seminars on consequence management.	4	F, C

Table A.2—Continued

Regional Organizations			
Program/Activity	**Description**	**Ends**	**Ways**
International Science and Technology Center	Provides weapons experts in CIS the opportunity to redirect their talents to peaceful activities: • Contribute to the solution of national and international science and technology problems. • Reinforce the transition to market economies. • Support basic and applied research. • Promote integration of CIS scientists into the global scientific community.	3	C, H, J
Southeast European Cooperative Initiative Container Security Task Force	Provides a forum for exchanging information on container security aimed at stopping WMD proliferation.	3	C
Partners and Allies			
Program/Activity	**Description**	**Ends**	**Ways**
South African Council for the Non-Proliferation of WMD	Administered by the South African Department of Trade and Industry. Mostly aimed at coordinating South African government and industry nonproliferation efforts, it also offers "regional assistance and protection" courses for African states that participate in CWC. The courses facilitate implementation of the CWC and provide a forum for states to discuss further cooperation.	3	B, C
NATO CBRN COE	NATO CBRN Center of Excellence. Czech initiative to provide a COE to NATO for development of doctrine, tactics, procedures, equipment, training, and exercises for combating WMD.	4	B, F, C
GTRP	UK "umbrella" program for its initiatives in FSU. These largely correspond to the U.S. Nunn-Lugar activities.	1, 2, 3	B, C, G
G-8 GP	G-8 Global Partnership for Nonproliferation of WMD. Twenty-one countries plus the European Union participate in and/or contribute funds to this effort aimed at securing WMD, primarily in FSU.	1, 2, 3	B, C, G

Table A.3
Programs and Activities Within the PACOM AOR

Department of Defense			
Program/Activity	**Description**	**Ends**	**Ways**
TEMPEST EXPRESS	This is a PACOM consequence management exercise.	2, 3, 4	F
MPAT	Sponsored by PACOM, this organization includes participation from states throughout the PACOM AOR. The MPAT major achievement so far is a planning document called the Multinational Forces Standing Operating Procedures, which was used effectively to coordinate actions during the tsunami. The latest development is a CBRN-TIM Defense Special Planning Group, which includes a "collaboration and cooperation" Web site.	3, 4	F, C
SPP	This National Guard program pairs states with National Guard counterparts. A number of consequence management exercises and workshops have been conducted.	4	D, F, C
CMEP	U.S. Army program to provide consequence management assistance though training and exercises.	4	F, C
COE DMHA	Sponsored by PACOM. It provides consequence management training and workshops for states and nongovernmental organizations in the Pacific region.	4	B, C
Asia-Pacific Area Network	PACOM-sponsored collaboration Web site. It serves as the portal for MPAT, TEMPEST EXPRESS, and COE DMHA.	4	C
Department of Energy			
Program/Activity	**Description**	**Ends**	**Ways**
Megaports	DOE initiative to provide radiation detection equipment and training at ports to detect WMD materials that could potentially be shipped to the United States. This program is complementary to DHS CSI.	3	B, A, G
INECP	DOE program to strengthen nonproliferation export control practices. It provides assistance through training and workshops.	3	B, C

Table A.3—Continued

Department of Energy			
Program/Activity	**Description**	**Ends**	**Ways**
INTERDICT/ RADACAD	DOE effort, conducted by Pacific Northwest National Lab. It provides training and exercises to assist states in WMD detection. It supports the ICP, SLD, and EXBS programs, which are supported by DOE, DHS, DoD, and DOS.	3	B, F
Department of State			
Program/Activity	**Description**	**Ends**	**Ways**
ATA	In addition to its primary focus on counter-terrorism, this DOS program provides several WMD courses, including WMD awareness, operations, and consequence management, to interested states.	3, 4	B
EXBS	DOS effort to provide training and equip-ment and to conduct WMD interdiction exercises. DOS partners with DHS, DOE, DOC, and DoD to implement the program.	3, 4	B, A, F, G
Department of Homeland Security			
Program/Activity	**Description**	**Ends**	**Ways**
IBIT	DHS (Customs and Border Protection) program that provides training exercises for preventing proliferation of WMD. The training is being accomplished primarily in conjunction with the EXBS program.	3	B, F
CSI	DHS program aimed at providing radiation detection equipment and training at selected ports. It is aimed at detecting WMD materials that might be shipped to the United States.	3	B, A, G
ICS	DHS program to install and test new or experimental radiation detection equipment/ procedures at select CSI ports.	3	I, J
Regional Organizations			
Program/Activity	**Description**	**Ends**	**Ways**
Association of Southeast Asian Nations Regional Forum	In February 2007, conducted a workshop for member states to improve compliance with UNSCR 1540.	3	C

Table A.4
Programs and Activities Within the SOUTHCOM AOR

Department of Defense			
Program/Activity	**Description**	**Ends**	**Ways**
UNITAS	SOUTHCOM exercise focused on South America. It includes WMD interdiction and consequence management elements.	2, 3, 4	F
TRADEWINDS	SOUTHCOM exercise focused on the Caribbean. It includes WMD interdiction and consequence management elements.	2, 3, 4	F
PANAMAX	SOUTHCOM exercise focused on Central America. It includes WMD interdiction and consequence management elements.	2, 3, 4	F
SPP	This National Guard program pairs states with National Guard counterparts. A number of consequence management exercises and workshops have been conducted.	4	D, F, C
Department of State			
Program/Activity	**Description**	**Ends**	**Ways**
ATA	In addition to its primary focus on counterterrorism, this DOS program provides several WMD courses, including WMD awareness, operations, and consequence management, to interested states.	3, 4	B
EXBS	DOS effort to provide training and equipment and to conduct WMD interdiction exercises. DOS partners with DHS, DOE, DOC, and DoD to implement the program.	3, 4	B, A, F, G
Department of Energy			
Program/Activity	**Description**	**Ends**	**Ways**
Megaports	DOE initiative to provide radiation detection equipment and training at ports to detect WMD materials that could potentially be shipped to the United States. This program is complementary to DHS CSI.	3	B, A, G
INECP	DOE program to strengthen nonproliferation export control practices. It provides assistance through training and workshops.	3	B, C

Table A.4—Continued

Department of Energy			
Program/Activity	**Description**	**Ends**	**Ways**
IEMC	International Emergency Management and Cooperation. DOE program to assist states with radiological and nuclear consequence management. It conducts exercises, training, and workshops.	4	B, F, C
Department of Homeland Security			
Program/Activity	**Description**	**Ends**	**Ways**
CSI	DHS program aimed at providing radiation detection equipment and training at selected ports. It is aimed at detecting WMD materials that might be shipped to the United States.	3	B, A, G
ICS	DHS program to install and test new or experimental radiation detection equipment/ procedures at select CSI ports.	3	I, J
Regional Organizations			
Program/Activity	**Description**	**Ends**	**Ways**
OAS	Recently conducted a workshop for member states on implementing UNSCR 1540.	3	C
OPANAL	This agency conducts workshops and seminars on nonproliferation issues.	3	C

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